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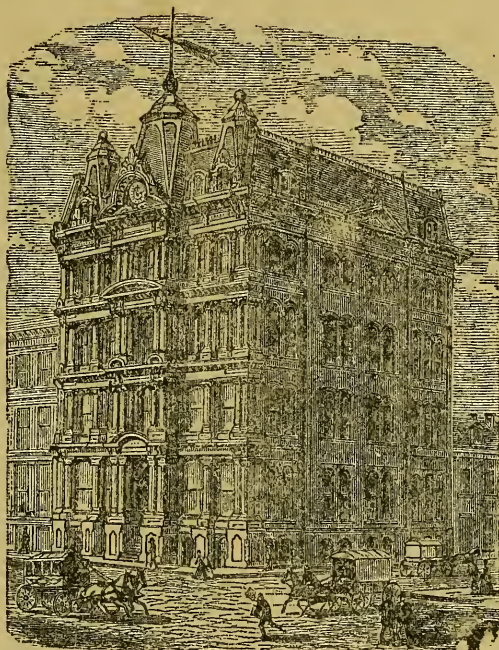
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INDUSTRIES OF PITTSBURGH.

Trade, Commerce and Manufactures.

HISTORICAL AND DESCRIPTIVE REVIEW.

For
1879.



For
1880.

Pittsburgh Chamber of Commerce—Germania Bank Building, corner Wood and Diamond Streets.

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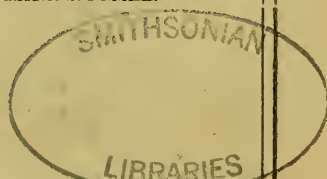
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PITTSBURGH:
RICHARD EDWARDS, EDITOR AND PUBLISHER.
1879.



PREFATORY.

IN placing this work in the hands of the public, the publisher feels no hesitancy in expressing the assured conviction that no volume heretofore issued, relating to Pittsburgh and its industries, contains so great an amount of useful, if not indispensable information.

For nearly six months a staff of reporters and writers, numbering at times more than a score, representing, in their separate departments, unusual ability, have been engaged in obtaining all possible facts within the compass of our design, and giving them a readable and orderly construction.

Embracing both cities and their environs within a radius of many miles, every trade, manufacture or mercantile enterprise has been sedulously and fully depicted—no firm or establishment of any prominence being willingly excluded from these pages.

No small expense has been entailed upon the publisher in providing the illustrations with which the work is embellished, and no efforts have been spared to secure such excellence, so far as its mechanical production is concerned, as shall give it an attractive appearance to every reader. A careful perusal of this volume, on the part of those residing at a distance or unfamiliar with the marvelous diversity of the resources of Pittsburgh, is earnestly commended as certain to excite interest and likely to suggest experimental relations, at least, that must conduce to the future profit of all parties.

The acknowledgments of the publisher are due to the Pittsburgh Chamber of Commerce for the aid and co-operation extended in the task undertaken, without which the enterprise would have been shorn of no small part of the brilliant success that has attended it. To Hon. J. K. Moorhead, President Chamber of Commerce; Wm. E. Schmertz, Esq., President Third National Bank; J. D. Weeks, Esq., Associate Editor *Iron Age*; Frederick K. Saward, Esq., Editor *Coal Trade Journal*; Hon. Thomas W. Davis, Collector Internal Revenue; American Almanac for 1879, by Ainsworth R. Spafford, Librarian of Congress; Wm. G. Johnston & Co., Stationers; and Geo. A. Kelly, of Geo. A. Kelly & Co., for substantial encouragement and highly-valued assistance, the publisher also returns the most cordial assurances of appreciation, and, with the belief that his labors will prove not altogether ineffectual in conducing to the general welfare of the business community, he subscribes himself

RICHARD EDWARDS.

Industries of Pennsylvania, Statistical and Historical Review.

THIS PAMPHLET IS COMPLETE, and is a portion of a large Illustrated Volume of about 2,000 pages, of great value and importance to Farmers, Merchants, Travelers, Emigrants, and all residing in or interested in the growth and prosperity of Pennsylvania and its various Industrial and Professional pursuits.

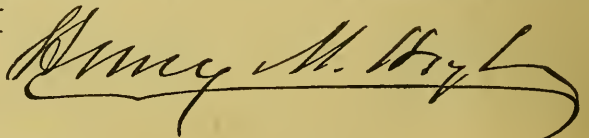
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COMMONWEALTH OF PENNSYLVANIA, EXECUTIVE CHAMBER,
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MR. RICHARD EDWARDS:

* * * * * Knowing your great experience and the success and value of your former publications, I can most cordially commend the undertaking to the public, and respectfully request all those in charge of the various public and private institutions and enterprises of the State, to extend to you the facilities necessary to enable you to prosecute the work, and give you such encouragement as will guarantee its speedy publication.

Yours Very Truly,



Resolution of the Pittsburgh Chamber of Commerce.

Resolved, That, appreciating the laudable character and magnitude of this undertaking, the Pittsburgh Chamber of Commerce cordially recommend this enterprise as conducive to the public good, and suggest such co-operation and encouragement by our business community as shall ensure its early publication and its success.

J. K. MOORHEAD, President.
GEO. A. KELLY, Secretary.



PROMINENT SCENERY OF PITTSBURGH.

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Dealer in

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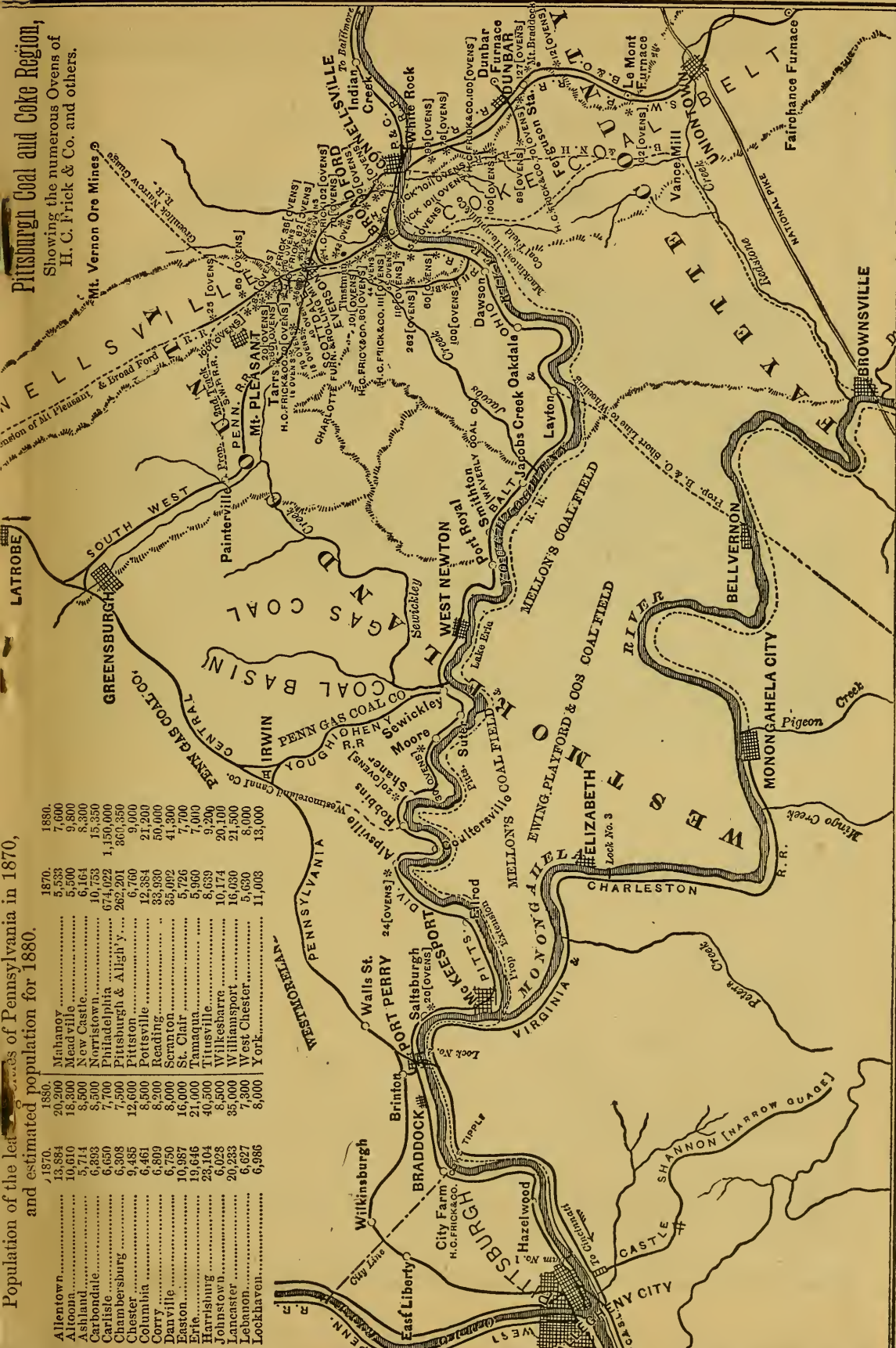
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Manufacturers of Flint Glass.

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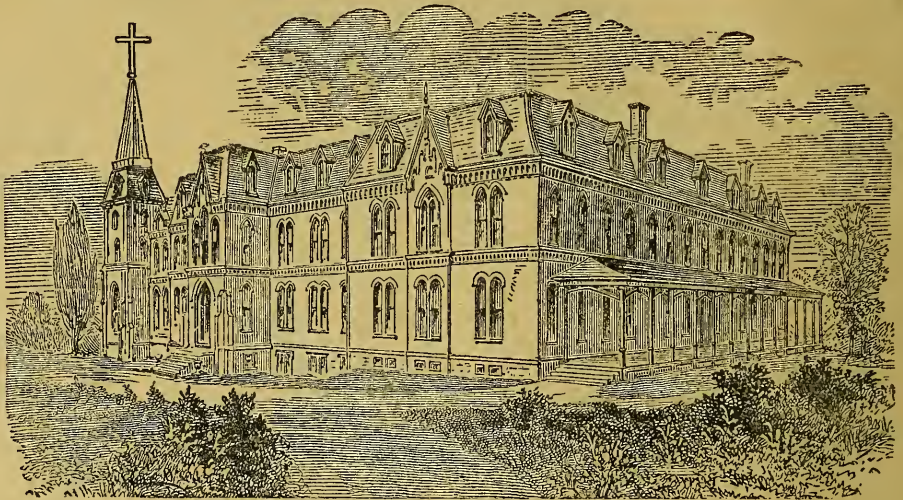
Population of the leading cities of Pennsylvania in 1870, and estimated population for 1880.

	1870.	1880.
Allentown.....	13,884	20,200
Altoona.....	10,610	18,300
Ashland.....	5,714	8,500
Carbondale.....	6,393	8,500
Carlisle.....	6,650	7,700
Chambersburg.....	6,308	7,500
Chester.....	9,435	12,600
Columbia.....	6,461	8,500
Corry.....	6,809	8,200
Danville.....	6,750	8,000
Easton.....	10,987	16,000
Erie.....	19,645	21,000
Harrisburg.....	23,104	40,500
Johnstown.....	6,028	8,500
Lancaster.....	20,233	35,000
Lebanon.....	6,827	7,300
Lockhaven.....	6,985	8,000
Mahanoy.....	5,533	7,600
Meadville.....	5,500	9,800
New Castle.....	6,164	8,300
Norristown.....	10,753	15,350
Philadelphia.....	674,022	1,150,000
Pittsburgh & Allegheny.....	282,201	360,350
Pittsford.....	6,760	9,000
Pottsville.....	12,384	21,200
Reading.....	33,930	50,000
Scranton.....	35,092	41,300
St. Clair.....	5,726	7,700
Tamaqua.....	5,960	7,000
Titusville.....	8,639	9,200
Wilkesbarre.....	10,174	20,100
Williamsport.....	16,030	21,500
West Chester.....	5,630	8,000
York.....	11,003	13,000



MAP OF COAL BASIN FROM WHICH THE CELEBRATED CONNELLSVILLE COKE IS MANUFACTURED. H. C. FRICK & CO. 1879.

SISTERS OF MERCY ACADEMY, Webster Av.



VIEW OF ST. XAVIER'S ACADEMY, WESTMORELAND COUNTY, PA.

Through the kindness of the Sisters resident at the Convent of Mercy located on Webster avenue, we are enabled to furnish the following sketch of that order as it exists in Pittsburgh, showing the aims, object, and benevolent, charitable and educational works of this noble band of self-sacrificing women, whose labors among the poor, destitute and suffering at home as well as on the battlefields during the recent War, have endeared them to the hearts of Protestants as well as Catholics in every section of the Union. The Sisters of Mercy first came to Pittsburgh in December, 1843, at the invitation and solicitation of the Rt. Rev. Dr. O'Connor, first Catholic Bishop of Pittsburgh, to establish their order in that then newly-erected diocese. This was the original foundation of the order in the United States. Seven Sisters, the Mother Superior being Sister Mary Francis Ward, emanating from the Convent of Mercy at Carlow, Ireland, volunteered for the American Mission and established their first convent on Penn avenue in a building rented from Dr. Speer and adjoining his residence. Two years later, for the better accommodation of their increasing numbers and their school which had been opened in September, 1844, they were compelled to seek more commodious quarters and removed to "Concert Hall," on the site of the present "Library Building." The special objects, or "Works of Mercy," to which the Sisters devote themselves, are: The education of female youth in every grade of society, the poor being especially cared for—the visitation of the sick and the protection of distressed women of good character. Since coming to this country until the present time the Sisters have labored indefatigably in these works, and have now under their charge the following charitable and educational institutions: ST. PAUL'S ROMAN CATHOLIC ORPHAN ASYLUM, which is located on Tanna Hill, and supports annually an average of 250 orphans of both sexes from the age of two years upwards until suitable homes can be provided or they are enabled to support themselves respectably. The institute is supported by the voluntary contributions of Catholics and the benevolence of other denominations. THE MERCY HOSPITAL, which was the first hospital established in Pittsburgh, opened January 1, 1847, at "Concert Hall," the spacious apartment styled the "ball room" being appropriated for this purpose, the select school hitherto occupying it being removed to one of the smaller houses adjoining. The principal physicians of the city have ever since formed the medical staff of this hospital. The first who volunteered their valuable services were the late Drs. Gazzan, Addison and Dan'l. McMeal, Sen., and the present venerable and esteemed Dr. Bruce. The present staff is composed of Drs. Jos. Dickson, Shaw, Sargeants, Christy, March, Hengest and Lee. The building now occupied as Mercy Hospital is situated on Stephenson street and was built by the people of Pittsburgh and opened in May, 1848. THE CONVENT OF MERCY, which is located on Webster avenue, was erected by the community from means brought to it by its members, and is the Mother House of the community. The Mother Superior and the Sisters who form her council reside here, and here are trained the young ladies who enter the convent with the intention of becoming members of the community. These are forbidden by rule to bind themselves by any obligation for two years and a half, this time being devoted to study and the practice of the duties to which they are to devote themselves. Should they become members of the community, a majority of whose votes are required before they can receive the habit of the order and for their profession. The Sisters in this house teach the following parochial schools: ST. PAUL'S CATHEDRAL SCHOOLS, the girl's department of which is attached to the Convent building, and was erected by St. Paul's congregation, and the boy's department in a school building near the Cathedral—OUR LADY OF MERCY SCHOOL, on Second street, ST. AGNES' SCHOOL at Soho, and ST. MALACHI'S SCHOOL on the South Side. Connected with the Convent is also ST. MARY'S ACADEMY FOR YOUNG LADIES, where may be obtained a complete and thorough education in the higher departments of study, as also in vocal and instrumental music, drawing, and the various branches of needlework. Religious instruction to Catholics is made an important matter wherever the Sisters teach, while children of Protestant parents are neither asked nor expected to participate in the religious observances or instruction. At the Convent of Mercy, ST. PATRICK'S on Seventeenth street, ST. MARY'S on Forty-sixth street and ST. BRIDGET'S Church on Enoch street, the Sisters have also schools where the same course of study is pursued as at the Mother House on Webster street. They have also a Convent with schools connected in Allegheny City, and at McKeesport, Allegheny County, and at Latrobe, St. Xaviers. ST. XAVIER'S ACADEMY is situated about three miles from Latrobe, in one of the most healthy sections of Western Pennsylvania, sufficiently elevated to command from every point an extensive view of the delightful country which surrounds it. The buildings are spacious and elegant, capable of accommodating upwards of one hundred and fifty boarders; there is amply play ground, the water and the products of the soil are excellent and abundant. Parents may rest satisfied that every attention will be paid to the comfort of the children placed at this institution, while the utmost care will be taken to nourish in their minds those principles of virtue and religion, which alone can make education profitable.

The number of pupils receiving instruction from the Sisters of Mercy in the Diocese of Pittsburgh is not less than five thousand. The members of the community, at present numbering one hundred and seventy-five, are principally the daughters of Irish or American parents, with some of French, German and Belgian origin, while not a few are natives of Pittsburgh and daughters of some of the oldest and most respected citizens.

INDUSTRIES OF PENNSYLVANIA.

CITY OF PITTSBURGH AND ALLEGHENY.

HISTORICAL AND DESCRIPTIVE REVIEW.

INSTITUTIONS, INDUSTRIES, COMMERCE AND TRADE,
BUSINESS AND PROGRESSIVE MEN.



Allegheny River.

Ohio River.

Monongahela River.

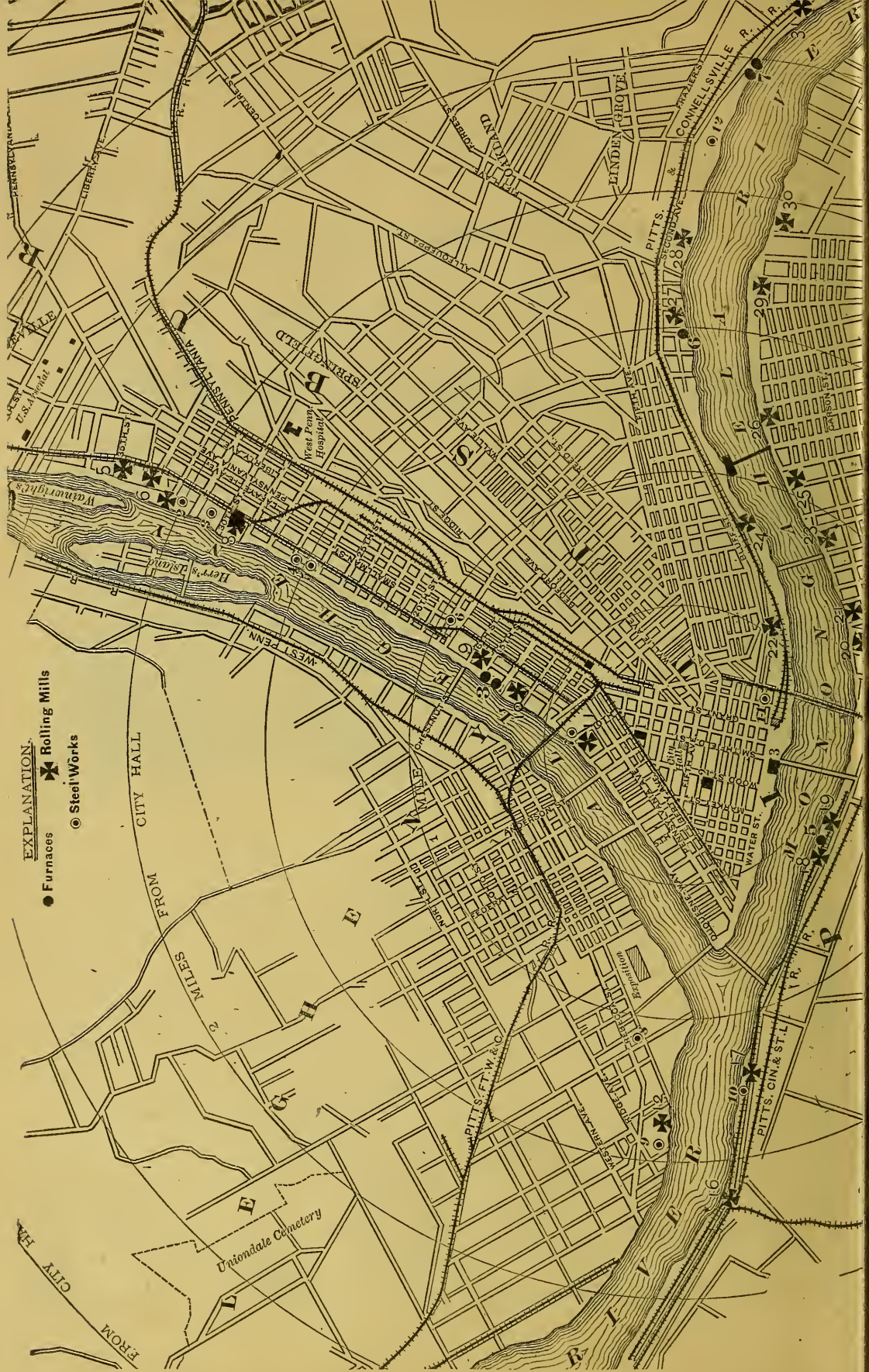
VIEW OF PITTSBURGH IN 1817.

In the compilation of this work, having for its object and main design a fair delineation of the Pittsburgh of the present, it is not intended to present any elaborate history of the past, except in so far as it may be found necessary by statistics and other means to exhibit contrasts that shall make the salient points of its existing characteristics or conditions more vivid and comprehensible. In the language of a celebrated American writer, "Pittsburgh is the most intensely interesting city on this continent," and round its cradle has been thrown, by poet and historian, the glamor of a romance through which we see the combat of two mighty trans-Atlantic antagonists and distinguish the war-cries of their savage adherents.

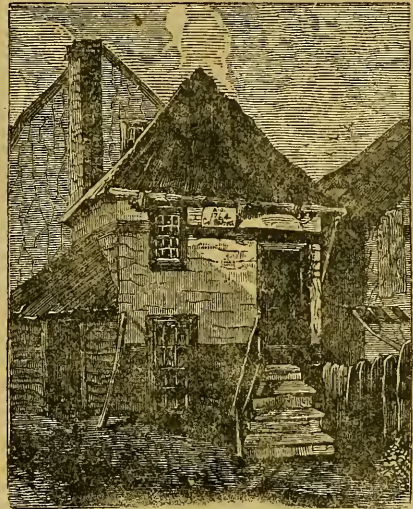
This spot was hallowed by the adventurous steps of the youthful *Washington*, and from this point, at the "meeting of the waters," one hundred and twenty-six years ago, his calm eye surveyed the matchless beauty of the wintry scene before him, and with an apprehension that grasped as by intuition all the advantages of the position, he "chose the station" that marked the very westward boundaries in the "march of empire," the skirmish line of civilization. Here was constructed the fortress, which falling into the hands of the enemy at the beginning of the seven-years' French and Indian War, was christened by its captors "FORT DUQUESNE," and around which group tales of fortitude and foray, "treason, stratagems and spoils" that still haunt the imagination and read like Oriental fictions to the rising generations. The illustrations present views of Pittsburgh as it appeared in 1817 and the old Blockhouse of 1764. All those events, however, connected with the early history of our city have been briefly arranged in chronological order for the reference of the reader, the plan of this work not involving more of antiquity than is necessary for a copious understanding of the Pittsburgh of to-day, its commercial advantages, institutions and resources.

GEOGRAPHICALLY,

the city is located in latitude $40^{\circ} 26' 34''$ N.; longitude $80^{\circ} 2' 38''$ W.; its topography being marked by many peculiarities, which give it an individuality of appearance possessed by no other town in America.



Situated at the confluence of the Allegheny and Monongahela rivers, the point from which begins the Ohio is the west extreme of the city proper, and the spot where a century ago clustered a hamlet of less than a score of primitive frontier shanties and log huts, forming the nucleus round which clustered and grew a splendid municipality. From this vantage ground, looking towards the great receding river, the national highway to the Gulf of México, and often called by travelers the "Rhine of America," the observer can see upon his right, across the commingling waters of the crystal Allegheny, which here merges into the Ohio, the city of Allegheny lining the banks of the streams as far east and west as the eye can reach and stretching back over a rising plain for more than a mile to the hills that crown the distance. On the left appear the tremendous bluffs that confront the Monongahela, at whose base along the margins of the yellow water are strung to the south-east further than can be seen countless manufactories for iron, steel and glass, the noise of whose machinery never ceases, the incessant crash of labor and dense volumes of smoke filling the air for miles in every direction.



*The Old Block House,
Built by Col. Boquet, 1764. Still standing on Point
Alley, near Penn Street.*

The tributary rivers diverging from this point at a generally obtuse angle, cause it to widen rapidly, a rise gradually taking place from the level of high water mark to an elevation of several hundred feet, forming the site of the city of Pittsburgh, the line of which extends along the course of both streams between eight and nine miles—a direct line from river to river marking the eastern boundary. All those thickly-settled manufacturing districts lying on the south side of the Monongahela river have been within the past few years consolidated with the old city. They embrace a very considerable amount of territory, and were formerly, and are yet casually referred to, as Birmingham, Brownstown, Mt. Washington, Sligo, Saw Mill Run, etc.

The western portion of the city is densely built, and from the contracted ideas of the early settlers, each of whom desired to live within range of the fort, the streets have not that spacious breadth so characteristic of prairie towns; from this reason, as well as to avoid an atmosphere never entirely free from smoke, this part of the city is devoted almost exclusively to business purposes, nearly all whose means or occupation permit, residing either at the East End, in Allegheny, or some railway suburb.

This change has taken place mostly within the past fifteen or twenty years, and is not only advantageous in the centralization of traffic, but highly conducive to the general sanitary condition, placing Pittsburgh among the most healthy cities in the country.

IN APPEARANCE,

from any surrounding stand-point, Pittsburgh presents a most striking and impressive sight. The graceful grade at which it builds up from the point and water levels to the high central plateau is extremely attractive, while the innumerable spires and domes produce an effect of architectural beauty unusually captivating. The public and private edifices are both numerous and costly, many of them being perfect illustrations of the adaptability of iron for building purposes, and monuments worthy of the Iron City in this direction. Of the ten bridges, six of which cross the Allegheny, and four the Monongahela, inside the city limits, five are of this material; the viaduct spanning the latter at its junction with the Ohio being regarded as one of the most superb triumphs of modern engineering; new in design, solid in structure and of enormous strength, it grasps the river at one splendid sweep, and imparts a feeling to the mind altogether creditable to the engineer who projected it and the capital that made its erection possible.



*First Log Cabin erected in
Allegheny, 1733.*

The iron bridges of the P'gh, Ft. W. & C. R. R., and the P. C. & St. L. R. R., respectively crossing the Allegheny and Monongahela rivers, are also masterpieces of engineering science and mechanical art, especially in the case of the former which was erected in lieu of a wooden structure, the demolition of the old and the construction of the new proceeding simultaneously, without interfering for one hour with the regular traffic of the road, which continued to run its trains as usual.

The wire suspension bridge at the foot of Sixth street, connecting Pittsburgh and Allegheny, formerly known as the St. Clair street bridge, is always the object of much attention on the part of

strangers visiting the city, for its massive amplitude and graceful lines. It was the design of the elder Roebling, and when finished, in 1860, was considered as capping the climax of his fame in bridge architecture.

PUBLIC WORKS AND BUILDINGS.

Springing from a thrifty Scotch, Welsh and Irish ancestry, the Pittsburghers have given more care to those substantial material advantages for which they are noted, and their acquisition, than devoted themselves greatly to the outward adornment of the city, or schemes involving its embellishment. Some excuse for this indifference may be also found in the fact that the soot and sulphur in the atmosphere soon militate seriously against the appearance of the finest structure, and more than all, the bulk of the populace, especially the more affluent classes, living in the outskirts or suburbs of the city, prefer to direct their attention to the improvement of those districts rather than to the scenes of their daily toil.

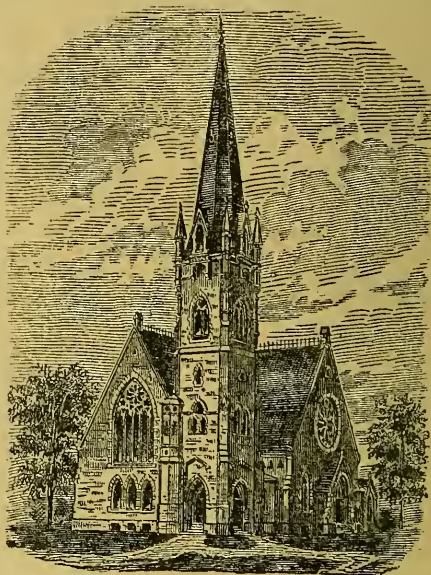
Marked advances, however, have taken place in this matter during the decade that has elapsed, and it is now confidently asserted that, in proportion to its population, Pittsburgh has spent more money on public works, improvements, streets and buildings than any city in the United States.

The Municipal Hall is one evidence offered of the truth of the above statement, and as the seat of the city government is worthy of a more detailed description than our space permits. Architecturally the building is one of the most handsome in Pittsburgh; constructed of solid white sandstone, at a cost of \$700,000, every convenience and modern appliance was introduced necessary to make it complete in all respects. Here are the offices of the Mayor, Controller, Engineer and Chief of Police, on the first floor; to the second are allotted the Council Chambers, City Clerk and Attorney, the Boards of Viewers and Health, and Water Assessors. Upon the mezzanine floor will be found the offices of the Street Commissioner, Building Inspector, and Council Messenger. The third floor is devoted to the uses of the Boards of Fire Commissioners and City Assessments, Water Extension Committee, Mechanical and Civil Engineers, Draughting Rooms, etc.; on the fourth floor is the office of the Fire Alarm Telegraph, with which the city is supplied, as well as a thoroughly disciplined paid Fire Department, and above this the cupola, which contains the turret clock and alarm bell. This clock, by a system of telegraph wires, and arrangements made with Prof. S. P. Langley, of the Allegheny Astronomical Observatory, is connected with the stellar clock of that institution, with which it moves in exact unison, affording a reliable and uniform standard of time for the entire community, from which all railroad schedules are estimated, labor begun and ended, and all the machinery of life regulated.

In the construction of the new Water Works Pittsburgh again illustrated a decided disinclination to do anything by halves, and in 1872 a system of water improvements was inaugurated on so vast a scale as to require for the purpose the purchase of over one hundred acres, seven years of constant labor, and a total cost of over \$4,000,000. The new reservoirs, of which there are two, are situated at the East End, about five miles from the business portion of the city, on the highest obtainable elevation above the Allegheny river, from which the water is supplied. These reservoirs have an aggregate capacity of 128,000,000 gallons, the mains by which they are supplied and the engines, boilers, and pumping apparatus being upon a scale simply stupendous. This colossal project, which is now in operation, with some modification of the original plans, together with one hundred miles of pipe with which the city is laid, will afford water facilities in the future, amply sufficient to supply a population three times as great as at present, the consumption now being about 15,000,000 gallons per day.

This thoughtful provision for posterity is characteristic, in a great measure, of such municipal legislation as has obtained under the enlarged views of late years, and stamps the city government as being eminently wise, and enlightened by a policy that demands more scope than can be afforded by the narrow limits of the present day for its operation and completion.

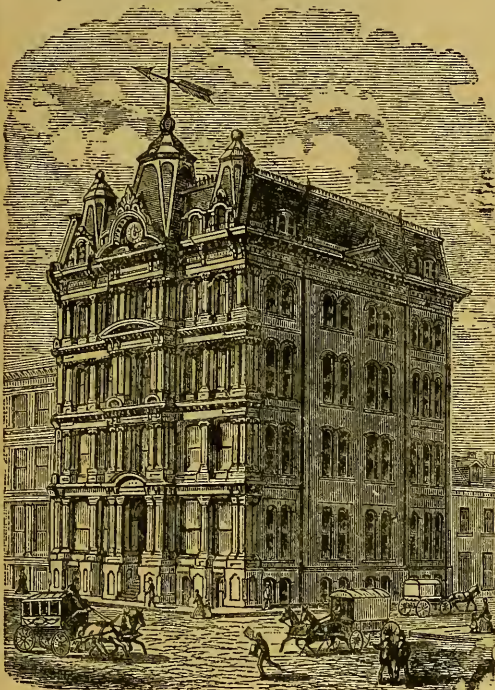
From public works and buildings to those resultant from private enterprise, the transition is an easy one, and here the many beautiful structures scattered throughout the city present a wide field for comment and description. Among those of greatest interest, the churches naturally come first, and of these in both cities there are not less in all than two hundred—many of more than ordinary magnitude and architectural magnificence. Perhaps the most perfect in regard to the latter quality is the Trinity Episcopal Church on Sixth avenue, which, besides having the finest chime



Shady-Side Presbyterian Church.

of bells in the city, has no superior in America as an enduring monument of artistic design and rare excellence in execution.

St. Paul's Catholic Cathedral is, with one exception, said to be the largest church in the United States, and is a very imposing structure, having an interior remarkable for its pillared vastness and simplicity of style. Of other churches worthy of the visits and attention of strangers, the following are but a few of the most prominent: the First Presbyterian, on Wood street; the Third Presbyterian and German Lutheran, on Sixth avenue; Christ's M. E. Church, on Penn avenue, &c.



Germania Bank Building, cor. Wood St. and Diamond Alley.

Of its commercial buildings, Pittsburgh can boast with equal truth—many of them illustrating the best styles of what may be called American mercantile architecture, conspicuous examples being seen in the building of the First National Bank, Dollar Savings Bank, Exchange National Bank, Second National Bank, Third National Bank, the Iron Bank Block, Fifth avenue, the Germania Savings Bank, which contains the rooms of the Chamber of Commerce, the Pittsburgh Safe Deposit Company, the Bank of Pittsburgh, the M. and M. National Bank, the Dispatch Building, Hostetter's Block, Library Hall, the First National Bank of Allegheny, the building of Wm. Semple, and others, so numerous as to require omission.

In its business portion the Iron City always wears an air of thrift and industry, which is in marked contrast to many equally large but less favored places, and, in its suburbs, the truth is evident to the most partial observer, that no city can show such lovely environs, with so great a diversity of ever captivating landscapes, dotted so profusely with the homes and villas of her thousands of opulent and comfortable citizens.

No description, however elaborate, could be so couched as to give a stranger an adequate view in his mind's eye of Pittsburgh, because of its vast dissimilarity to every other city upon the continent, this very uniqueness defeating all comparison. From so far as we have cared to go in this direction, the non-resident reader (and this work is designed mainly for such) may have gleaned some approximate

idea of the general plan and appearance of the city, the accompanying illustrations rendering efficient aid in this direction, and leaving him with these, other matters of more interest and import arise and demand attention.

A COMMERCIAL CENTER.

The first question that naturally and promptly arises in regard to any community claiming to be a trade center, is, "How is it related, and what are its connections with the rest of the world?" To this query an answer with reference to Pittsburgh leads to a discussion of those facilities by which she is placed in communication with the consumers of her products, who are found in every habitable quarter of the globe.

The river highways that nature furnished are in the first instance the conspicuous channels by which communication is most easily secured and maintained with remote centers of traffic, and by this means, and with the advantages thus afforded, Pittsburgh commands an unequalled position, gaining uninterrupted entrance into the interior of not less than eighteen of the most fertile and wealthy States in the Union, as well as reaching unchecked, the Central and South American States, which already form an important objective point for her exports, and inviting markets, that become annually more available. This field alone, for commercial operations, opens up to the practical and progressive observer, a future of splendid prosperity for Pittsburgh, toward which she is rapidly bending her steps, and for the attainment of which her energies are being exerted to the fullest extent.

The first move in this direction has been taken by the general government, by the inauguration of the jetty system at the mouth of the Mississippi, and an appropriation for the improvement of the Ohio river.

The former enterprise, under the charge of Capt. J. B. Eads, has already proved successful to an unlooked-for degree, while the works upon the latter project are yet unfinished and untested.

The plan for the improvement of the Ohio river is almost too well known to require extended notice here. It may be stated, however, that the scheme involves the construction of dams at such

intervals along a great part of its course as shall preserve a uniform stage of water, and thus admit of navigation during the entire year. Heretofore this has been impossible on account of low water, which for many months put a period to all traffic by this means.

The work upon the first dam of the series was commenced in 1878, at Davis Island, a point about five miles below the city, and is now being pushed rapidly forward, several hundred men being employed upon the works. For this structure the French plan has been adopted by the best engineers in the employment of the government as being the most available and altogether practicable. This is the same system used to slackwater the Seine, and affords certain advantages that are possessed by no other dam in so perfect a degree. The main features of the structure being that the entire dam can be sectionally and rapidly depressed till it lies flat upon the bed of the stream when the natural stage of water is sufficient without artificial aids, and its equally prompt elevation when desired. This whole operation, as well as the management of the locks, will, it is said, require the labor of but two men, so admirable are the mechanical appliances by which the entire structure is controlled and regulated.

It is impossible to overestimate the advantages that will accrue to Pittsburgh by the completion of this system of improvements, and safe to assert that under its influence a new era of prosperity will dawn upon her that has no parallel in the past. The opening of a *cheap and reliable* means of shipment to those countries that, with an ordinary course of development, are bound to become our most profitable customers, will have an effect upon the commerce, trade and manufactures of Pittsburgh not yet fully realized by the strongest advocates of the improvement of the Ohio river.

Some facts collated from the report of the "Chief of the Bureau of Statistics," on commerce, navigation and foreign commerce, for the year 1878, may perhaps convey some idea of the increasing magnitude of the exports of the United States to those countries whose chief wants lie in the direction of Pittsburgh's products, and to many of whom we shall shortly have direct access by water.

The table shows the comparative difference between the amounts of the present exports and those of twenty years since, and must convey a significant lesson to every intelligent reader:

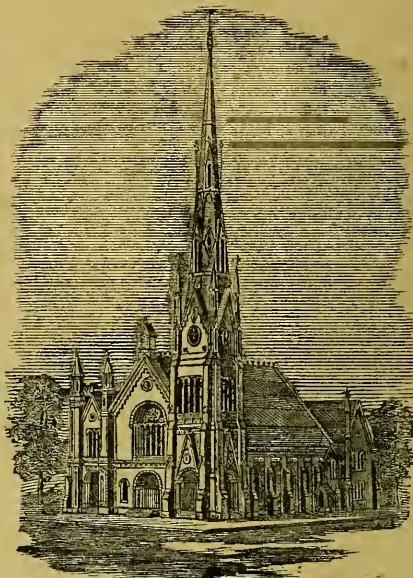
EXPORTS FROM THE UNITED STATES.		1858.	1878.
Argentine Republic.....	\$	1,438,235	\$ 2,152,109
Brazil.....		6,256,976	8,686,704
Central American States.....		172,262	1,635,764
Danish West Indies (estimated).....		550,000	2,000,000
French West Indies and French Guiana.....		558,107	1,590,665
West Indies, Honduras and Guiana (British).....		6,723,048	9,601,655
Hayti and San Domingo.....		2,504,552	4,896,354
Mexico.....		2,992,546	7,492,884
West Indies and Guiana (Dutch).....		675,366	1,005,630
Cuba.....		12,268,202	13,162,382
Porto Rico.....		2,035,202	2,434,564
United States of Colombia.....		1,562,964	4,692,429
Uruguay.....		630,356	1,093,432
Venezuela.....		1,720,499	3,040,359

These figures afford a very just conception of the rapid increase of a trade to which Pittsburgh must look in the future for the bulk of her revenue, and to which she is invited through the increased facilities resulting from the improvements to which reference has been made.

The Monongahela river, which has been navigated for more than a third of a century by means only of a system of locks and dams, is an evidence in a comparatively small way of the usefulness of such a procedure, and its ultimate benefits in making tributary to Pittsburgh one of the most productive valleys both in coal and agricultural resources to be found in the Union.

RAILROADS.

Some account of the artificial channels to the outer world properly follows a description of the natural and most ancient avenues; and in these creations of toil, capital and genius, Pittsburgh is certainly not behind any of her sister municipalities, being the point of junction for no less than ten railroads, most of them trunk lines.



Third Presbyterian Church.

Of these roads, the Pennsylvania Central, as being the oldest and perhaps the most important, should be entitled to the first position, as not only affording the directest route to the seaboard cities; but, pursuing a course through the most materially prolific portions of the State, which it traverses latitudinally for three hundred and fifty miles, this great artery of traffic places Pittsburgh within ten or twelve hours of the Atlantic ports, and connects with the entire system of eastern railroads.

The Baltimore & Ohio Railroad presents another favorite outlet to the East by a route veering to the south-east and making its objective point, Baltimore, through the Monongahela and Cumberland valleys, and mineral lands that will be referred to hereafter in connection with natural products.

Both the above roads are active competitors for the trade of Pittsburgh, and are justly regarded as two of the best managed organizations in the United States, combining in themselves an amount of talent and capital which inures greatly to the benefit of the commerce of this city.

By the Allegheny Valley Railroad north-eastwardly, the central trunk lines of New York are reached and connections made for the lake routes west, or all points east.

The most important outlet to the West is afforded by the Pittsburgh, Ft. Wayne & Chicago Railroad, which, in operation twenty-five years or more, has done no little to promote the commercial relations of Pittsburgh with the West and North-West. This road, at various points, taps the network of railways which ramify over the whole West, and proves the shortest for trans-continental travel.

The Pittsburgh, Cincinnati & St. Louis Railroad presents another channel to the West by a southerly course, reaching the points named in its title by the most direct and available routes, connecting and interlacing roads that place the States of Ohio, West Virginia, Indiana and Illinois within easy reach of the Iron City.

The Cleveland & Pittsburgh Railroad opens a northern track for travel and trade, which, with the Pittsburgh & Erie Railroad, and the Pittsburgh & Lake Erie Road (the latter being the last brilliant evidence of Pittsburgh's enterprise), affords such ample communication with the lakes and the trunk lines to the North-West as leaves nothing in this direction for the most ambitious citizen to desire.

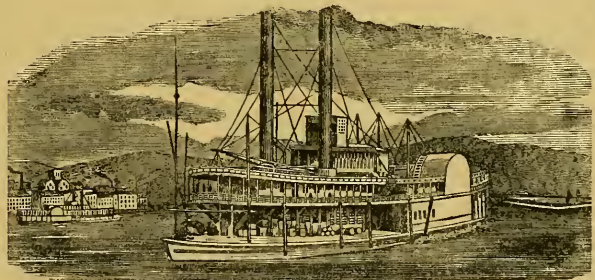
Besides the roads already mentioned, the following, of a present local character, are not by any means to be ignored: the Pittsburgh, Virginia & Charleston Railroad, whose projected point of completion is indicated in its title, is in operation only for about twenty-five miles along the southern bank of the Monongahela river; the West Pennsylvania Railroad, which traverses the north side of the Allegheny river for an equal or greater distance, an outlet from the great oil fields of Pennsylvania; and the Pittsburgh & Castle Shannon Railroad, a narrow gauge railway connecting at present with the Pittsburgh & Southern R. R., local environs, and coal mines of great magnitude.

These eleven great arteries, through which the vivifying tide of traffic is forever streaming, certainly confer a position upon Pittsburgh, so far as these facilities extend, that can not be otherwise than of the highest advantage to her commercial and productive thrift. We present herewith some statistical facts and figures in connection with these roads that will prove of interest to the reader as showing not only the advantages they confer upon Pittsburgh, but the wealth and resources of the regions through which they pass within an established trade radius.

From the report of Mr. William Wilcox, Inspector of the First Bituminous Coal District of Pennsylvania, for 1878, to the State Secretary of Internal Affairs, the following data have been collated: This district embraces the counties of Allegheny, Washington, Greene, Fayette, Westmoreland, Somerset and Bedford, and lies to the south, south-east and south-west of Pittsburgh; the two last named counties being the most remote easterly and possessing in all but 12 mines worthy of record. The whole district is one of the most productive in the world, and contains inexhaustible supplies of this mineral, the quality of which for manufacturing, illuminating or heating purposes is unsurpassed.

Along the lines of these various railroads are placed the mines which supply the bulk of all the bituminous coal consumed in the United States, their distribution is shown by the following table, the trunk lines including the various branches in brackets:—

{ Pittsburgh, Cinn. & St. L. R. R. }	22 Collieries. "
{ Chartier's Valley R. W. }	
Pittsburgh & Castle Shannon,	2 do.



Picture of the once famous Pittsburgh and Cincinnati Packet "Allegheny." Time from Louisville to Cincinnati, 9 hrs., 50 min., Receiving the Horns from the celebrated Steamer Telegraph No. 2.

{ Pittsburgh, Washington & Balt'e. R. R. Hickman Branch, Mt. Pleasant Branch, Berlin Branch, Salisbury Branch, Bridgeport & Bedford Branch, Six Mile Run Branch, Youghiogheny Branch,	.....	69	Collieries.
	Pennsylvania Railroad, South-west Penn'a. R. R. }	44	do.
	West Penn'a. R. W.....	4	do.
	{ Allegheny Valley Railroad, } Plum Creek Branch,	6	do.
	Little Saw Mill Run R. R.....	1	do.
	Montouss Run R. R.....	4	do.

Besides the mines above enumerated, all of which are immediately within the tributary range of Pittsburgh, it may be well, while confined to the first bituminous district, to state that there are upon the Monongahela river 86 mines, and upon the Youghiogheny river 3 mines, independent of railway facilities, making a total of 244 bituminous coal mines, the aggregate product of which for the year 1878 was, as closely estimated by the Inspector from satisfactory data, nut coal and slack *not included*, 9,372,881 tons of 2000 pounds each. To attain this result is required the labor of over 18,000 operatives directly, besides a number impossible to estimate in the immediate contingent occupations of shipping and maintaining the necessary roads, machinery, barges, steamers and general appliances. The dependent manufacture of coke alone engages the attention of forty-one firms, who operate in all 3,902 ovens and manufacture annually 75,577,200 bushels of coke, employing directly about 1,000 laborers and others. The prodigious increase that has taken place in this branch of industry may be more readily observed by a comparison, which indicates significantly the vitality inherent in the resources of this city. In 1842 Messrs. S. & J. Cochran, who are still engaged in the business, began the first manufacture of coke in this district by the construction of two ovens on the Youghiogheny, the product of which as a very hazardous venture, they shipped on a flat boat to Cincinnati, where it arrived in safety, and found a more ready market than the projectors of the enterprise had at first dared to expect. This cargo consisted of six thousand bushels, and at that time was considered a very considerable one. In 1878 the shipments of coke to western and south-western parts from the Monongahela and Youghiogheny valleys amounted to 65,697,000 bushels with every appearance of a substantial and continued increase in the traffic, and a more universal demand. These are some of the facts presented by the State Inspector of mines for the First Bituminous Coal District of Pennsylvania.

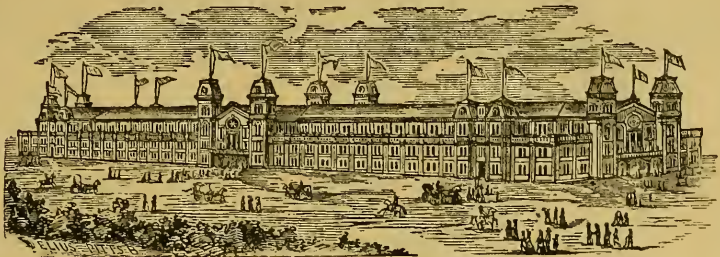
The report of the Inspector for the Second District, Mr. J. J. Davis, is almost equally interesting as this section lying to the north and embracing those counties situated in between Lake Erie and the New York line, and Allegheny and Westmoreland counties on the south, is also a territory over which extends the influence of Pittsburgh, its capital, labor and commerce. In this district of the bituminous coal divisions of the State are 58 mines, nearly half of which are located in Clarion and Mercer counties, which are directly accessible by the Allegheny Valley and the Erie & Pittsburgh railroads and their branches. In the operations for which these mines form a basis are employed over 2,000 workers in the various departments, the production in 1878 being about 675,000 tons of coal, exclusive of slack and nut. The manufacture of coke in this district is a very large additional item to swell the importance of the natural resources in this department, and it is to be regretted, though the law under which he acts does not require it, that Mr. Davis failed in his report to the Secretary of the Interior to give accurate statistics in reference to this important department of the coal trade.

In a valuable article read by Wm. P. Shinn, Esq., chairman of the Edgar Thomson Steel Works, (Limited,) before the American Institute of Mining Engineers, convened in this city, May 13, 1879, it is stated, in commenting upon the coal interest, of which Pittsburgh is the centre, that the surrounding area in Pennsylvania alone of bituminous coal is not less than 15,000 square miles, exclusive of the tracts easy of access in Ohio and West Virginia. From the same authority it appears that the total production of coal in the United States during the year 1878 was 49,130,584 tons, of which Pennsylvania supplied 17,605,262 tons of anthracite and 13,500,000 tons of bituminous, or over 63 per cent. of all the coal mined in the United States. The soft coal produced in the Pittsburgh districts representing not less than 50 per cent. of all the bituminous produced in the country, the true importance of which is not thoroughly understood without consideration.

From the same paper some figures are taken with reference to the increase in the manufacture of coke that deserve attention, as being highly indicative of the vital forces constantly operating to enlarge the borders of Pittsburgh's prosperity. From the most reliable data, and in accordance with the estimates of expert and experienced producers, it appears that the following table, stated in tons of 2,000 lbs. is as nearly correct as possible:

1875, Coke produced	666,495 tons.
1876, " "	770,758 "
1877, " "	869,429 "
1878, " "	1,012,328 "

An increase of nearly 100 per cent. in the short period of four years, and with no evidences of abatement in growth during the current twelve months. Such evidences of splendid progress, while calculated to fill the mind of a stranger with astonishment, has no such effect upon the average Pittsburgher, who surveys such results with a calmness devoid of enthusiasm, as being quite in the natural order of his experience in the past, and equally to be expected as the outcome of the future.



Exposition Buildings, Allegheny City.

The matchless advantages possessed by Pittsburgh for the manufacture of coke, is an ample assurance that, no matter what unfortunate contingencies may arise in time to come, this must always be the main source of supplies for the entire country in this commodity, which also guarantees a perpetuity to this location as the centre for the production of pig iron, a reflection which suggests some consideration of the great staple and ponderous industry wherein lies the pith and puissance of Pittsburgh as the manufacturing stronghold of America.

THE IRON TRADE.

Around the early history of every modern industry that has had and still exerts a pregnant influence upon the condition of the race is centered an interest, an absorbing attraction, that manifests itself in the significance attached to the labors of the historian and archaeologist, who with undaunted resolution delve after the details of germinal facts.

The circumstances surrounding the erection of the first blast furnace in Pittsburgh, the nationality, characteristics and mental complexion of its projector, his hopes, fears, first trials, struggles and conquests, would furnish matter for a story of no less real importance than that of many a half forgotten empire, and would assuredly captivate by episodes of more living human sympathy. But little of such material however has been preserved, and as the last competent writer on the subject we borrow from the paper of Mr. Shinn the following succinct sketch, which begins in this connection upon the topic of Pig Iron: "The first blast furnace erected in the immediate vicinity of Pittsburgh was located on Two-Mile Run, near the present Shadyside station, on the Pennsylvania railroad. It was built by George Anshutz, about 1792, and was operated only about two years, as its location appears to have been a mistake, based upon the supposition that iron ore was to be found in that vicinity. It was not until 1859 that the second blast furnace—and the first of the existing furnaces in Pittsburgh—was built by Graff, Bennett & Co., on the south side of the Monongahela river, and known as "Clinton" Furnace. The pig iron industry of Pittsburgh is therefore less than twenty years old at this date. There are now twelve blast furnaces in Pittsburgh and its immediate vicinity, and three more in progress; the annual capacity of which, when the three named are completed, will be about 486,000 net tons of 2,000 pounds.

The furnaces are in detail as follows:

Built.	Name.	Owned by	Height.	Bosh.	Annual Capacity Tons.
1859.....	Clinton.	Graff, Bennett & Co.	45 feet.	12 feet.	14,000
1861.....	Eliza No. 1.	Laughlins & Co.	60 "	17 "	} 70,000
1861.....	Eliza No. 2.	" "	60 "	14 "	
1863.....	Superior No. 1.	Superior Iron Co.	45 "	12 "	} 25,000
1863.....	Superior No. 2.	" "	45 "	12 "	
1865.....	Shoenberger No 1.	Shoenberger, Blair & Co.	62 "	13 "	} 48,000
1865.....	Shoenberger No 2.	" "	62 "	13 "	
1872.....	Isabella No. 1.	Isabella Furnace Co.	75 "	18 "	} 80,000
1872.....	Isabella No. 2.	" "	75 "	20 "	
1872.....	Soho.	Moorehead, McLeane & Co	65 "	19 "	31,000
1872.....	Lucy No. 1.	Lucy Furnace Co.	75 "	20 "	} 85,000
1877.....	Lucy No. 2.	" "	75 "	20 "	
1879.....	Furnace A.	Ed. Thomson Steel Co. (L)	65 "	13 "	25,000
1879.....	Furnace B.	" " "	80 "	20 "	45,000
1879.....	Furnace C.	" " "	80 "	20 "	45,000

The following table, compiled from the statistics of the American Iron Trade as furnished by James M. Swank, secretary of the American Iron and Steel Association, shows the proportion which

the product of Pennsylvania pig iron bore to that of the United States, and the proportion which the pig iron produced in Allegheny county bore to that of Pennsylvania, and the whole United States respectively, during the years 1874 to 1878 inclusive, all stated in tons of 2,000 lbs.:

YEAR.	Pig iron made in United States.	Pig iron made in Pennsylvania.	Per cent. of total product.	Pig iron made in Allegheny county.		
					Per cent. of Penn'a product.	Per cent. of United States product.
1874.....	2,689,413	1,213,133	45.11	143,660	11.84	5.35
1875.....	2,266,581	960,884	42.40	131,856	13.72	5.82
1876.....	2,093,236	1,009,613	48.23	128,555	12.73	6.14
1877.....	2,314,585	1,153,356	49.83	141,749	12.29	5.12
1878.....	2,577,361	1,342,633	52.09	217,299	16.18	8.40

From this statement it will be seen that the pig iron product of Allegheny county has steadily increased from 5 34-100 per cent. of the product of the United States in 1874 to 8 40-100 per cent.—or almost exactly one-twelfth—in 1878.

The amount of pig iron brought into Pittsburgh by rail and river during 1878, was 250,476 gross tons, equal to 230,533 net tons; adding to this the pig iron made in Allegheny county during the year, 217,290 net tons, makes a total of pig iron made and brought into Allegheny county during the year 1878 of 497,832 net tons; or 19 32-100 per cent.—nearly one-fifth—of the total product of pig iron for the United States. To this add muck bars, 2,033 net tons; blooms and billets, 35,791 net tons; scrap iron, 64,536 net tons, and we have a grand total of 600,192 net tons of pig iron, muck bar, blooms, billets and scrap, most or all of which was consumed in Allegheny county during the year 1878, an amount nearly equal to one-fourth of the whole pig iron production of the United States for that year.

ROLLED IRON.

The first rolling mill in Allegheny county, owned by Christopher Cowan, was built in 1812, and known as the Pittsburgh Rolling Mill. And the second the Union Rolling Mill—not the present mill of that name—was built in 1819, and was accidentally blown up and permanently dismantled in 1829, the machinery being taken to Covington, Kentucky. This mill had four puddling furnaces, the first in Pittsburgh; it was also the first mill in Pittsburgh to roll bar iron, and was the largest and most extensive mill of the kind in the western country.

The Grant Hill Iron Works were erected in 1821, by William B. Hays and David Adams, near where the Court House now stands.

The Juniata Iron Works were erected in 1824, and were owned by Dr. Peter Shoenberger. The Sligo Mill was erected in 1825 where it now stands, by Robert T. Stewart and John Lyon.

Pig metal for the supply of these mills was mostly brought from the Juniata Valley, which also supplied them with blooms. The Juniata pig iron and blooms were hauled over the Allegheny Mountains to Johnstown, usually on sleds in the winter season, and taken down the Conemaugh, Kiskiminetas and Allegheny to Pittsburgh on the spring and fall freshets. In 1821 Pittsburgh had 8 rolling mills, using 6,000 tons blooms, chiefly from the Juniata Valley, and 1,500 tons of pig metal.

In 1856 there were in Allegheny county 25 rolling mills and 33 foundries. The six rolling mills in existence in 1826 employed 281 hands, and made 5230 tons of iron, valued at \$559,000 and consumed 561,700 bushels of coal. In 1879 the situation in this regard is as follows:

Number of rolling mills completed.....	34
Number of rolling mills building (at McKeesport).....	1
Number of common puddling furnaces.....	769
Number of Danks puddling furnaces.....	11
Number of Siemens puddling furnaces.....	10
Total puddling furnaces.....	790
Number of employees.....	12,172
Annual capacity in tons.....	500,000

The number of single puddling furnaces in rolling mills in the United States—counting a double furnace as equivalent to two single—was in 1878, 4463, so that the number in Allegheny county was 17 7-10 per cent. of the number of puddling furnaces in the United States, while the number of rolling mills in the United States being 340, Allegheny county contained 10 per cent. of their number.

The following table shows the amount of rolled iron, including sheets and nail plates, produced in Allegheny county and in the United States during the years 1874 to 1878, stated in tons of 2,000 lb.:

TOTAL ROLLED IRON, INCLUDING NAILS.

Year.	In the United States, Tons.	In Allegheny County, Tons.	Per Cent. of U. S. Product
1874.....	1,110,447.....	274,625.....	24.73
1875.....	1,097,867.....	239,069.....	21.78
1876.....	1,042,101.....	247,943.....	23.79
1877.....	1,144,219.....	268,486.....	23.46
1878.....	1,232,686.....	282,333.....	22.93

It will be seen that the proportion of rolled iron—exclusive of rails—made in Allegheny county has varied from 24.73-100 per cent. in 1874 to 22.93-100 per cent. in 1878 of the whole product of rolled iron—exclusive of iron rails—made in the United States. The falling off in percentage of the rolled product, indicated since 1874, is mainly, if not wholly, owing to the fact that the wages paid puddlers and other rolling-mill expert labor in Pittsburgh are from 30 to 50 per cent. higher than is paid for similar labor in rolling mills east of Pittsburgh. Six of the rolling mills have connected with them nail mills, having an aggregate of 472 nail machines, which produced, in 1874, 562,995 kegs of nails of 100 lbs. each, and, in 1878, 441,013 kegs, the former being 11.45-100 per cent., and the latter being 10.10-100 per cent. of the product of the United States; the reason for the reduced proportion being attributable to the same causes as that given for rolled iron.

Allegheny county has many specialties in iron among its manufactures, prominent among which are, Messrs. Jones & Laughlins' cold-rolled iron, for shafting, piston rods, etc.; Messrs. W. D. Wood & Co.'s planished sheet iron, the only successful rival of the Russia sheet iron; the Tin and Terne Plate Works of the United States Iron and Tin Plate Co., and Messrs. Kirkpatrick, Beale & Co., the only manufacturers of that material in the United States; and Andrew Kloman's Universal Mill, for the manufacture of weldless eye-bars and other bridge material, by a new and highly successful process, applicable to iron, but which is particularly successful with steel.

The specialties above enumerated are only such as are found nowhere else in this country, there being many other specialties manufactured here which are not, however, exclusively products of this country.

In glancing at the iron trade of Pittsburgh, that branch of it which relates to founding and casting is second in importance, labor and capital, to the rolling-mill interests, and equally prominent so far as the chief celebrity of this city is concerned. The first iron foundry was established in Pittsburgh in 1803. This industry having effected a lodgement here grew with all the vitality of an indigenous plant. So considerable has been the advancement made in this direction that it has become an accepted fact that in large work or small, from a thumb latch to a columbiad carrying a ball weighing 1000 pounds, the facilities which Pittsburgh enjoys for casting iron or steel are not duplicated on this continent. From the first foundry erected in this city in 1803 and the direct line of its business successors, has been turned out ordnance that has bellowed in three wars of the Republic. Over 2,000 guns and mortars were cast during the war of the Rebellion, and from Perry's victory on Lake Erie to the battle of the Wilderness the resolute "dogs of war" cradled in Pittsburgh; have been ever ready to persuade for peace with most eloquent enunciation.

A detailed history of the first Pittsburgh foundry would make interesting and instructive reading, but each enterprise of this description is filled with matter to attract, and the general plan must in this department of the work be adhered to. In Pittsburgh at the present time are, including roll and heavy machine, general stove and malleable iron foundries and machine shops and foundries combined, not less than about forty separate establishments engaged in these closely allied industries, besides which there are extensive forges, engine and machine shops, plows and agricultural implement works, manufactories for steam pumps, builders and domestic hardware, saddlery goods, locomotives, bolts and nuts, spikes and rivets, iron bridges, wrought iron pipe and boiler flues, cast iron pipe, boilers, stills and tanks, wire iron fences, car wheels, chains, horse-shoes, nails, sheet iron, and in short every possible article for the construction of which modern skill and invention have regarded iron as the best or cheapest material. These operations employ thousands of expert artisans, whose wages are higher than paid any similar class of workmen in the world, creating a reactive influence upon the community at large that is promotive of the most satisfactory results.

STEEL.

Pittsburgh stands pre-eminently at the head of the crucible steel production of this country. In 1813 there was a steel furnace here owned by Tuper & McKowan, probably making only blister steel. In 1829 an Englishman named Broadmeadow, made blister steel at Pittsburgh, and about 1831 made a cast steel of low grade in pots of his own manufacture. His works were located at Bayardstown, now Fifth ward, near the old Fifth ward Market House. Josiah Ankrum & Sons, file makers, Pittsburgh, are said to have succeeded in making their own steel about 1830. In 1831 Messrs. Whitmore & Havens successfully produced blister steel at Pittsburgh. In 1833 the firm of

NOTE.—The product given for Allegheny county in Mr. Swank's report includes iron rails; but the only iron rails made in Allegheny county from 1874 to 1878 were of very light patterns, from 12 to 20 lb., and but very small in quantity.

G. & J. H. Shoenberger commenced to manufacture blister steel here. At about 1840 the firm of Isaac Jones & William Coleman was formed at Pittsburgh, and manufactured blister and spring steel, which business they successfully prosecuted until 1845, when they were succeeded by Jones & Quigg, who built the Pittsburgh Steel Works. In 1846 Coleman & Hailman commenced the manufacture of blister and plow steel, and subsequently made all but first-quality cast steel.

In 1850 there were in Pennsylvania thirteen works, with an annual product of 6,078 tons, of which six works, with a capacity of 3278 tons, were in Pittsburgh. In 1853 the firm of Singer, Nimick & Co., which had been organized in 1848, was successful in producing the higher grades of cast-steel for saw, machinery and agricultural purposes. In 1859 Messrs. Hussey, Wells & Co. were successful in making crucible cast steel of the best quality; and in 1862 Messrs. Park, Bro. & Co. accomplished the same result. There are now in Allegheny county:

Crucible steel works.....	12
Having Siemens pot furnaces.....	33, with 1123 pots.
Coke holes.....	223 "
Total pots.....	1346
Open-hearth furnaces, 4 completed, 2 erecting, total.....	6

The erection of the Edgar Thomson Steel Works, the only Bessemer steel works in Allegheny county, was commenced by Carnegie, McCandless & Co. in the spring of 1873, and in 1874 the organization was changed in name to "The Edgar Thompson Steel Co., Limited." Their works, located at Bessemer Station, on the Pennsylvania railroad and Baltimore and Ohio railroad, and on the Monongahela river, commenced operations on September 1st, 1875. They have two Bessemer converters, blooming mill, and rail and billet mill, and a five-ton forge hammer. The company is also erecting three blast furnaces on its ground near the steel works. This company, although its works have been in operation less than four years, reached in 1878 the largest output in rails and billets made by any works in the United States in any one year, and the largest output of Bessemer ingots made by any "two converter" plant in the world.

The production of the various qualities of steel in the United States, and in Allegheny county, respectively, during 1877 and 1878, was as follows, stated in tons of 2000 lbs.:

Kinds of Steel.	United States.		Allegheny County.			
	Total Product.		Total Product.		Proportion of United States Product.	
	1877.	1878.	1877.	1878.	Per ct. 1877.	Per ct. 1878.
Bessemer steel ingots.....	560,587	732,226	73,278	99,344	13.07	13.57
Open-hearth steel ingots.....	25,031	36,126	800	1,025	3.20	2.84
Crucible cast-steel.....	40,430	42,906	24,747	27,365	61.34	64.95
All other steel.....	11,924	8,556	8,323	6,579	70.	76.90
Bessemer steel rails.....	432,169	550,398	54,635	72,246	12.65	13.13

Of the total product of Bessemer and open-hearth steel ingots in the United States, in 1877, there was made in Allegheny county 12.65 per cent., and of the total product of the United States in 1878, Allegheny county manufactured 13.06 per cent. Of the total product of crucible, cast, blister and puddled steel manufactured in the United States in 1877, Allegheny county produced 63.16 per cent.; and of the product of the United States in 1878, Allegheny county produced 66.93 per cent.

The percentage of product in open-hearth steel has heretofore been low, but there have been erected and put in operation since January 1, 1879, two open-hearth steel furnaces—one by Anderson & Co. and one by Hussey, Howe & Co.; two others are in process of erection by Shoenberger, Blair & Co., and Mr. Thomas S. Blair is about to start his open-hearth furnace at Glenwood, heretofore operated in connection with the manufacture of iron sponge. When the open-hearth furnaces now being erected are completed, Allegheny county will take the lead in open-hearth steel, as she has heretofore done in crucible steel.

Pittsburgh has many specialties in steel manufacture, probably the most important of which is the higher qualities of tool steel, which, during the past ten years, have almost entirely supplanted, in the markets of this country the English tool steel—a result reached only after the most patient effort and in opposition to the most determined prejudice of the manufacturers and users of tool steels.

It is notable, also, in connection with the Bessemer steel manufacture, that the steel for the cables of the East-river bridge was manufactured here into wire rod by Anderson & Co., and that the steel for the Glasgow bridge over the Missouri river, the first all-steel bridge in this country, was manufactured under the "Hay" process by the Edgar Thompson Steel Co., Limited, and rolled by Hussey, Howe & Co., and Andrew Kloman, into the various shapes used in constructing that bridge.



View of the Great City of Pittsburgh from the South Side of the Monongahela River, showing Allegheny City in the distance.

GLASS.

In that part of this work which is devoted to the details of the various industrial enterprises of Pittsburgh will be found much matter pertaining to the glass trade, which will amply repay the perusal of the reader and convey a very satisfactory idea of the extent and importance of our resources in this direction, which ranks first in prominence after iron and steel.

The first glass house in Pittsburgh is said to have been in operation in 1795, and was located near what is now called "Glass House Ripple," in the Ohio river. It is, however, on record that Gen. James O Hara and Major Isaac Craig commenced arrangements for the manufacture of glass in 1796 with an eight-pot furnace. In 1807 George Robinson and Edward Ensel commenced the manufacture of flint glass, and in 1808 they were sold out to Messrs. Bakewell & Page; their successors, Messrs. Bakewell, Pears & Co., having carried on the business to the present time. In 1826 there were in operation in Pittsburgh and vicinity seven glass works, with a capacity of 27,000 boxes of window glass, and of flint glass to the value of \$30,000. The number of glass manufactories now in Pittsburgh, is as follows:

	Works.	Pots.	Hands.	Product.
Table Ware.....	24	242	1,895	\$2,000,000
Window Glass.....	24	234	1,200	2,000,000
Flint Glass Bottles.....	8	66	619	420,000
Glass Chimneys.....	9	90	790	500,000
Green Glass Bottle.....	10	67	944	1,200,000
Total.....	75	699	5,448	\$6,120,000

The amount of glass manufactured in Allegheny county is about one-half the total production of the entire United States, and from every reasonable indication will not only maintain this supremacy, but even become more pre-eminently prosperous in this branch of manufactures. A conclusion of this kind seems not to be avoided, from the fact that every year marks some surprising improvement for the rapid and accurate manipulation of this material, under patents which are held exclusively by Pittsburgh producers. During the past few months one extensive manufacturer on the South Side has discovered and perfected a process, by which goods are produced in almost exact imitation of the finest French ceramic ware, a result never heretofore obtained in glass, and on every side is observed the sedulous application of more effective appliances, for the retention and enlargement of this staple industry, and its more comprehensive development. One fact in relation to the glass trade of Pittsburgh bears more than ordinary significance, when considered with reference to the future aggrandizement of this department of our resources, and that is the gratifying increase of an export trade, that but a few years since had no existence whatsoever.

In accordance with the annual report of the Chief of the Bureau of Statistics on the Commerce and Navigation of the United States for the fiscal year ending June 30, 1878, it appears that in 1871 the exports of glass and glassware amounted to \$466,447, and for 1878 \$869,682, an increase of nearly 100 per cent., making the prediction a safe one that for the fiscal year just closing the exports will amount to over one million dollars.

These figures at first to the casual observer may not seem to carry the real importance that should be ascribed to them, but when it is considered that England, France, Belgium, Italy and other countries are largely engaged in supplying the world with glass and glassware, under the protection of ancient guilds, and the advantages of cheap labor, materials and an established trade; the progress made in this direction by a far removed inland city of a new continent, should be regarded as little less than marvelous, and should have the effect of inciting renewed and active efforts for the accomplishment of annually greater results.

PETROLEUM.

But two decades have passed away since the systematic commercial production of petroleum staggered the credulity of the whole world, and hurried to Western Pennsylvania all the drifting argonauts of fortune from Nova Scotia to New Mexico.

No such exodus to any given locality had hitherto been known in this country or perhaps in any other. Not even during the gold excitement were the shores of California visited with crowds so vast or heterogeneous. Towns of no small magnitude actually sprang into existence in the night like mushrooms, and the oil regions of the Keystone State were metamorphosed almost by magic from deserted wilderness into thriving, populous communities, while sudden wealth poured from the punctured bosom of mother earth, with a copious prodigality that seemed absolutely limitless. The consequent excitement of that period in which Pittsburgh was deeply involved and the immediate conversion of numerous refineries which had been erected for the distillation of coal into refineries for petroleum, is a well remembered phase of local history. This city became at once the virtual centre of the oil trade of the world, a position still sustained, and of which it would be difficult to deprive her.

The production of petroleum in 1859, though far from being a discovery in one sense, was in another a very important one. As early in the history of America as 1627 the fact of its existence was made a matter of comment by a French missionary, Joseph Dalaroche, in letters written from near that locality which has lately become so prolific of oil known as the Bradford regions. De

Charlevoix, a French historian, traveler and Jesuit, in his *Historie de la Nouvelle France*, recounts from his journal of May 1721, the fact of their being at the head waters of the Allegheny fountains, which are like oil, having the taste of iron, with a "piquante odeur," and being used by the natives for the alleviation of pain.

This is regarded as the first reliable mention of petroleum in Pennsylvania, and to a greater or less extent from that time its existence has been generally recognized. For many years, prior to 1859, it was gathered from the pools and waters of oil creek by absorption in blankets or woolen fabrics which were spread upon the surface of the stream and at intervals wrung out. By this tedious process the annual product may have reached perhaps a hundred barrels, which was known as Seneca oil, rock oil or naphtha, being sold as a medicament for certain diseases, especially those of a rheumatic character. Kier's Petroleum Liniment was well known during the period between 1851 and 1859-60. This preparation was manufactured by Mr. Samuel Kier, a resident of this city, by whose advice the first commercial oil producer commenced operations, and in whose shop was constructed the first oil rig, primitive tools that would now be regarded as curiously obsolete.

Supplied with these implements, Col. E. L. Drake, of New Haven, Connecticut, began to bore for oil at Titusville, exactly twenty years ago (June, 1859), and after laboring for more than two months was rewarded by striking a twenty-five barrel well, and from that moment began the prodigious excitement before referred to, and petroleum became an article of commerce with a dominant interest of its own. Ten years from the date of its first production on this basis the annual amount exported to foreign countries, especially to Europe, in crude, refined and the various products of petroleum had reached the sum of \$31,122,338, the bulk of which was handled in Pittsburgh and controlled by Pittsburgh capital. For the fiscal year ending June 30, 1878, the export of this commodity had reached the amount of \$46,574,974, a result not to have been anticipated, as during that year the production had more than ever overstepped the bounds of demand, reducing the value of petroleum to figures lower than had been known up to that period.

The following table presents a summary of the production of petroleum in the United States, by which it will appear that from Pennsylvania emanates 98 per cent. of all the natural oil found in the country:

PRODUCTION OF CRUDE PETROLEUM.

	1877.	1878.
Pennsylvania.....	13,135,651 barrels.	15,165,462 barrels.
West Virginia.....	77,172 "	250,000 "
Kentucky and Tennessee.....	73,000 "	75,000 "
California	73,000 "	75,000 "
Ohio.....	36,500 "	45,000 "
	13,490,171 "	15,608,462 "

When it is remembered that nearly 6,000,000 barrels of petroleum were refined in Pittsburgh during the past year, to say nothing of the shipping and handling of other vast quantities, some idea may be gained of the wealth which is derived from this source alone by this immediate locality. The largest manufactory and market contiguous to the oil regions of Pennsylvania, Pittsburgh has, from the supply of tools, engines, tubing, barrels, materials and merchandise, secured a very considerable annual revenue, which seems in no danger of immediate reduction. Such being in brief the history of the oil trade, it can hardly be denied that it forms an episode in the annals of commerce for which there is absolutely no parallel and no precedent, and to which in no small degree the prosperity of Pittsburgh may be readily traced.

MISCELLANEOUS RESOURCES AND PRODUCTIONS.

The coal, coke, iron, steel, glass and oil interests of Pittsburgh have now been passed in rapid review, and though from these various sources are formed the very bulwarks of our commercial thrift, which are, fortunately, staunch enough to prevent all hostile inroads, still there are innumerable lesser interests which all converge to fill out symmetrically the full development of Pittsburgh's resources and advantages, and are well worthy of attention.

Among these, the manufacture of cotton goods has from a very early period engaged considerable capital, and furnished occupation for a large number of operatives. The mills in this locality are situated in Allegheny City, and are five in number—two being of extraordinary magnitude. These mills, in the aggregate, run 36,000 spindles, 800 looms and 350 cards—the total number of employees ranging between 1200 and 1500, to whom are paid about \$250,000 annually; the production, during the same period, varying, of course, in value, with the state of the market, but considered at the present time to be not less than \$1,000,000.

The manufacture of white lead is carried on extensively in this community, and with uniform success to those engaged in this department of industry, as well as the establishment of a reputation for a superior article that is peculiar to Pittsburgh. In the two cities there are eight factories for the corroding of lead and the making of derivative contingent products, which employ not less than 225 hands, to whom is paid about \$125,000 per annum. The consumption of raw material by these concerns amounts to 6,500 tons of pig lead annually, 200,000 gallons linseed oil and 300,000 lbs.

acetic acid, besides kegs, cans and boxes, in due proportion—the total product in paint leads, &c., in kegs of 25 lbs., being about 700,000 packages. Many of these works also prepare paints and colors upon a scale of considerable magnitude, and more than one has lately given attention to the manufacture of iron-oxide paint, which is establishing a superiority for certain purposes that makes it more desirable and considerably cheaper than lead paints.

The production of salt in this city, which, owing to the low price of this commodity, seems to be but of small importance, is yet attended with a very considerable revenue, and is obtained with such ease and convenience as to attract attention. It was demonstrated some years since, in making experimental borings for oil, that salt water might be found under either of the cities almost anywhere at a depth of from 800 to 2000 feet. One manufactory of this description possesses a well 1600 feet deep, which spouts brine at the rate of from 800 to 900 barrels per day, the water being ejected by the force of natural gas, which is collected and used for lighting and heating the works. Of the four establishments in operation, the value of the product annually is about \$130,000, and is remarkable for purity and whiteness.

In alluding to natural gas, it may be said that it is more than a conjecture that, at from 2000 to 3000 feet from the surface, exist those veins of carburetted hydrogen so commonly struck in the oil regions of Butler county, where, for an extended period, this gas has been burning in an uninterrupted and unquenchable stream. Some years since a question arose in regard to the possible utilization of this wonderful product for purposes of iron and glass manufacturing, and a line of pipe was laid to the nearest gas well, 18 miles distant, connecting at this end with the extensive rolling mills of Spang, Chalfant & Co., which are located on the north side of the Allegheny river, above the city. The experiment proved a complete success, and, though many alterations were required, the mills from that time have been operated solely by this novel and inexpensive fuel. Some idea may be gained of the enormous pressure exerted by this gas from the fact that an India-rubber ball was shot through the entire length of the pipe in 16 minutes. The Rochester Tumbler Co., situated about 25 miles from the city, on the Ohio river, is also supplied from two wells on the premises, with the same convenient combustible, which is found to be far superior in the process of annealing to any other fuel. Many other concerns are also in possession of this advantage, and the presumption generally obtains that, at no distant day, a complete revolution may be effected in all manufacturing operations requiring heat, by this means.

Looking at the ponderous resources with which Pittsburgh is naturally endowed—coal, iron, petroleum, gas—it is impossible, taking into account her felicitous geographical position, to avoid the conclusion that she is but in the very morning of her greatness, merely tipped by the slanting beams of a prosperity that shall, in coming years, deluge with golden showers of unalloyed success. The rapid growth of the city has created a demand for building materials that greatly fosters several important industries which derive from this development a continual impetus. First among these may be noted the manufacture of brick, which is carried on upon a very extensive scale, there being not less than 25 separate manufactories of building brick, and ten of fire brick and tile, employing, in all, from 800 to 1000 workmen; the products realizing not far from \$1,000,000 annually.

The lumber interest, in this connection, is also of conspicuous importance, and involves in itself sufficient capital and labor to make it of no small import. The territory in Pennsylvania and New York watered by the sources of the Allegheny river was for many years the main and almost only source of supply for timber possessed by Pittsburgh, and so great was the drain upon this section that, in 1831, the amount of lumber annually floated was estimated at 30,000,000 feet, which, for 10 or 15 years, gradually increased, till the probable annual receipt of lumber by the Allegheny river exceeded 50,000,000 feet. Such an enormous decimation of the forests, however, could not continue always, and this, together with the devastations of fire, impaired materially the productive richness of this district. The demand, however, was in no way abated; on the contrary, the necessity for lumber became more urgent, and the construction of railroads through western Pennsylvania about that time, fortunately, opened up new regions in this State, as well as by the lakes, secured connection with the great forest of Canada, Michigan and the Northwest. In this city, at the present time, are engaged in the lumber business, having saw-mills and yards, or planing-mills, sash, door and box factories, not less than 75 different concerns, whose operations employ about 1300 laborers and artisans, and to whom is paid, in the aggregate, more than half a million dollars annually—the total products having an estimated yearly value of \$3,500,000.

As contingent industry, consuming a large amount of lumber and wood of various kinds, the manufacture of furniture is not to be ignored. Pursuing this industry are from 12 to 15 concerns in the cities, whose aggregate output is estimated at nearly a million dollars annually, engaging the labor of from 300 to 400 artificers and others, and consuming certain classes of hardware, marble, upholstery goods and varnish, to a large amount.

Another interest employing considerable quantities of lumber and hard woods is that related to the manufacture of wagons and carriages. In this branch of industrial art are found in the cities about thirty establishments, some of them very extensive and widely celebrated for the elegant finish and designs, as well as the substantial character of their work. More than 400 artisans are engaged in the various branches of this trade, and when the value of repairs is taken into consideration in connection with the manufacture, the aggregate business of these concerns may be estimated as about \$750,000 per year.

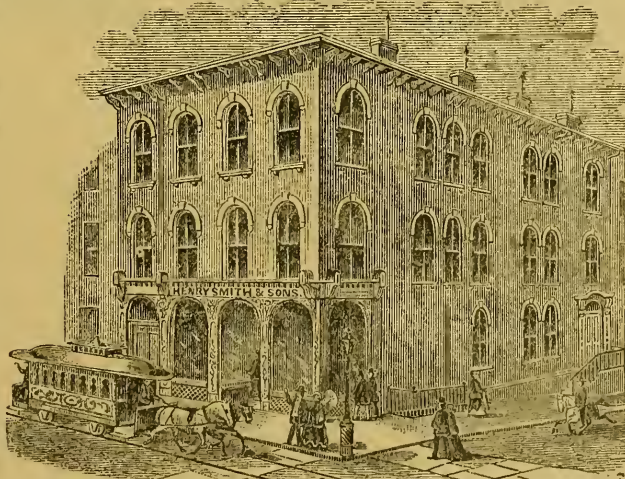
The manufacture of barrels and kegs forms no unimportant factor in the general prosperity, to which it adds materially. From the refiners of petroleum and manufacturers of nails and white lead comes a great demand for articles of this description, to supply which there are about twenty cooperages, either independent or in connection with oil refineries, involving the labor of not less than from 500 to 600 coopers, whose work results in an annual product valued at \$1,250,000.

Elsewhere will be found a table compiled from the very latest and most reliable sources of information, showing the exact number of firms, individuals and corporations engaged in each separate manufacture, vocation or mercantile pursuit, a glance at which, together with a perusal of the detailed descriptive notices contained in this volume will afford all the facts upon these various matters that can be considered practicable. There are almost innumerable avenues pertaining to manufactures of less importance through which we have conducted the reader in the articles above referred to, and to which special consideration is invited, as making up the sum of Pittsburgh's stamina; and, as before remarked, the object of this sketch does not involve minute particulars, these being furnished in another department, but rather breadth of drawing and effect.

MERCANTILE AND FINANCIAL.

It is frequently urged by comparative strangers with regard to the mercantile interests of Pittsburgh, that they lack force, importance or aggressiveness, and while freely admitting the pre-eminent greatness of our manufacturing operations, allege that in trade we are far behind other cities of like or less population. As applied to the past the truth of these strictures can not be readily gainsaid; but as relating to the present condition of affairs they are certainly in wide contravention of the facts.

The assertion may seem startling and perhaps paradoxical, but it is nevertheless a verity that heretofore the mercantile interests of Pittsburgh have been *retarded by too much prosperity*. In ordinary business ventures Pittsburgh merchants absolutely slept upon their oars, and the favoring trade-winds of smiling circumstance actually wafted them into snug financial harbors, while their only knowledge of storms was confined to casual dreams, suggested by the far off thunder of disasters elsewhere. When the complications arising from the monetary convulsions of 1873, involved Pittsburgh, there was a general and wide awakening of these somnolent mariners, and a struggle began with unpropitious elements in which many seeming goodly crafts were swamped, but in which was displayed, almost for the first time, some native vigor, resolution and laborious activity which saved the fleet and taught a salutary lesson worth millions. Under the influence of the instruction so unwelcome to the learner, it is shown that during the past six or seven years, in the teeth of great obstructions, the mercantile strength, influence and operations of this city have palpably augmented, and that an era of undoubted energy has begun that will lead to the most satisfactory results. In the departments of dry goods, boots and shoes, hardware of all descriptions, —much of which, especially in fine tools, is manufactured here—leather, liquors, drugs, clothing and cloths, groceries, crockery and earthenware, pork and provisions, grain, flour and malt liquors, etc., in a wholesale way, there has been a marked development by the determined extension of a trade radius which has been aided in no limited degree by lately acquired advantages in railroad competitions of unusual importance. The outlook for the future with reference to the commercial thrift of this city has never appeared in such luminous colors, and the field for enterprise in this direction presents as many solid inducements for the investment of pluck and capital as any in the country. With the experience of the past as a guide, Pittsburgh is fast achieving a position in this regard to which she has always been justly entitled; from which she has been debarred only by a sentiment of intense conservatism and too much good fortune. As they stand to-day, the character of the financial institutions of this city will compare favorably, for solvent stability and correct management, with the monetary concerns of any city in the world, and their prosperity may be taken as a sure barometer, indicative of the general condition of affairs. As a conclusive evidence that they are prosperous it may be stated that there are in Pittsburgh seventy-one banks and banking institutions with an aggregate capital of about \$20,000,000 and an aggregate surplus of over \$4,000,000, which is a showing that must be taken as proof of robust financial health. Many of these banks

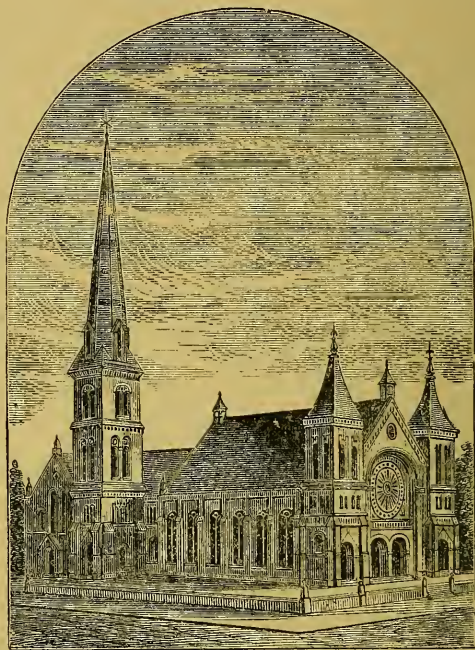


View on Wylie Avenue—Business house of H. Smith & Sons. (See page 192.)

are of such antiquity as to be indissolubly identified with not only the history of this city, but that of the nation. The Bank of Pittsburgh in a career of sixty-five years has made in trying times advances to the general Government, and through every financial crisis that has occurred during its existence has paid its circulation liabilities in gold, except in 1837 when it suspended specie payments for a few days at the instance of the citizens who assembled in convention for the purpose of making such a request, laboring under the needless apprehension that the demands upon the coin resources of the institution would be greater than it could meet. From the organization of this bank till the present time the fiduciary concerns of Pittsburgh have justly acquired an unusually fair reputation for being conducted upon the safest and most reliable principles. The number of failures that have occurred among them are indeed very limited, confined mainly to private enterprises, and, except in one or two instances, far from being of disastrous magnitude. The same remark may be made with reference to the fire insurance organizations, the outgrowth of Pittsburgh capital, of which there are nearly half as many as there are banks, some of which carry on an underwriting business which extends over the entire United States, adding no little to the general revenue of the city.

The solvency of Pittsburgh insurance companies has been so conspicuous as to occasion a wide recognition of the fact that, while not assuming vast or unwieldy proportions, they afford equal security and protection with the most vaunted institutions elsewhere, and are conducted with vigilance and discretion. The total amount of capital invested in the fire-insurance companies of these cities, in round numbers, amounts to not less than \$4,500,000—a sum which represents the accumulations as well as capital of the twenty-four joint-stock fire-insurance companies, having their home offices in these cities, and emanating from local enterprise. It has been asserted that Pittsburgh, more than any other city of like population in the United States, felt the depressing influences (following the year 1873) which disordered the values of the entire country, but a careful examination will prove that in reality this community has absolutely suffered less than any other of even approximate dimensions. In 1874 and 1875 the trade, manufactures and commerce went forward with unabated prosperity, seemingly unaffected by the torpor that began to paralyze other places. In 1876 some premonitions began to obtrude themselves, more indicative, however, of future than real present trouble; work was plenty—no one was compelled to an enforced idleness, and though there had, it is true, been some serious failures, it can not be said that, up to this time, contractions had seriously grappled Pittsburgh in dead earnest, or that the conflict between existing conditions and inevitable results had assumed an aspect other than that of a lively skirmish, in which a great deal of smoke and dust is produced, with but little damage or destruction. During the two years that followed, however, the combat deepened, and a goodly number on the defensive were carried from the field, "dead for a ducat," hipped in pocket and drained of fiduciary fluids. Even during this period the hum and roar of Pittsburgh's industries never ceased. No crowds of idle men loitered in the parks or thronged the thoroughfares, giving ocular evidence of commercial prostration—no soup-houses were necessary—and no extraordinary charitable disbursements demanded, as was the case in almost every other manufacturing city in the world.

And now, in the middle of the year 1879, it may be emphatically asseverated, without the aid of an active imagination or assumptions that germinate alone in hope, but with a solid phalanx of supporting facts at hand, that Pittsburgh has finally and assuredly crossed the rocky isthmus of adversity that debarred from pacific waters, and has resumed a voyage favored by auspicious gales, and signs that indicate prolonged prosperity in a manner unmistakable. In coal, iron, glass, and other products and manufactures, active operations are rife on all sides; prices firmer, a better demand, and a feeling of general security to which the community has long been a stranger. Mills, factories, furnaces, forges, foundries and mines are resonant with the reiterant clangor of labor, and a tidal wave of commercial good fortune floods every industrial avenue.

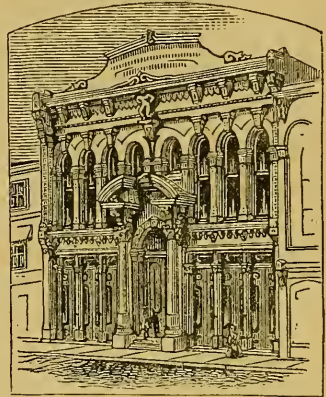


Fourth Baptist Church.

PUBLIC INSTITUTIONS, EDUCATIONAL FACILITIES, THE PRESS, &c., &c.

In pursuing reflections with reference to the material advantages of Pittsburgh in regard to its resources and the prestige that it has acquired as a manufacturing center, it should not be overlooked that, in other respects, it has developed with an equal pace, and that, in the organization of public, charitable and benevolent institutions, schools, colleges, hospitals, libraries and other means for the education of humanity or the amelioration of the condition of the unfortunate, provision has been made in keeping with the most enlightened views of a Christian community and the dictates of the highest civilization.

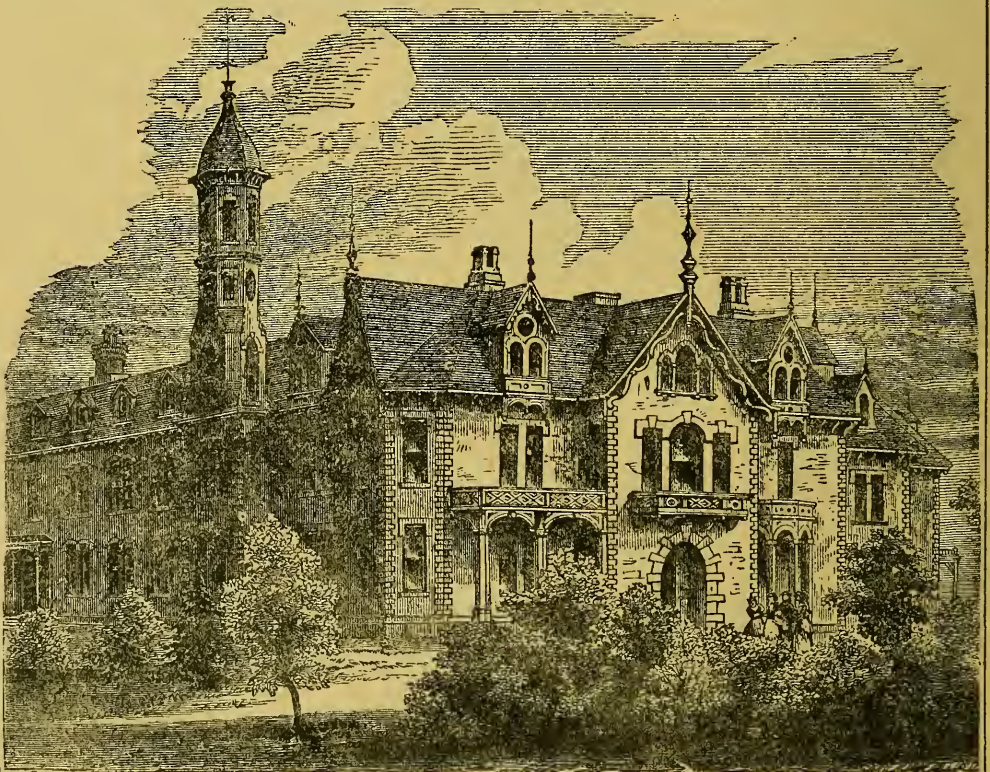
From the last report of the State Superintendent of Public Instruction, it appears that there are in the cities of Pittsburgh and Allegheny 78 school buildings, 61 of which are constructed of brick or stone in the most substantial manner, involving the most approved arrangements for ventilation, heating and the general convenience and comfort alike of pupil and preceptor. These buildings are subdivided into 628 schools, governed by local school boards and central boards of education. Six hundred and forty-one teachers, male and female, are employed in these schools, which are so graded and arranged that by progressive advances the scholar may—beginning in the primary department—graduate from the central high school with a finished academic and classic education, entirely at the public expense. Aside from the benefits conferred by this comprehensive system, there are numerous educational institutions for both sexes which afford almost unrivalled advantages for the acquisition of the higher branches of culture. Some of these have attained a wide celebrity, and number among their classes students from the most remote States. The Western University of Pennsylvania is perhaps the best illustration of the truth of this statement. The college was chartered by the State in 1819, and a splendid building erected, which was formally opened in 1822, but unfortunately consumed during the great fire of 1845, with all its philosophic appliances, collections, archives and libraries. Another structure, however, was shortly erected on Duquesne Way, which was also burnt down in 1849, the course of instruction being thereupon suspended until the present University building was built, on Ross and Diamond Sts., opposite the Court House, in 1855. From that time the institution has flourished with wonderful vitality. In 1858 George Woods, LL.D., was appointed Chancellor, a position which, for 21 years, he has filled with marked usefulness and ability. During this period the University has been liberally endowed by public-spirited citizens, and those who perhaps recognized the beneficial influence of the institution upon their own early training. One of the most prominent patrons of the college, William Thaw, Esq., alone became its sponsor for \$100,000, which was donated in such a manner as to cost the generous giver nearly double that sum. By the aid of these endowments it has become possible to reduce the tuition fees to a merely nominal sum, while greatly enlarging the curriculum, which now embraces a range equal to the highest acquirements, including ancient and modern languages, military and civil engineering, natural sciences, laws, &c.—the advantages for the study of astronomy in connection with the Allegheny Observatory, and the lectures of Prof. Samuel P. Langley, the well-known astronomer and one of the faculty, not being equaled in the United States. With ample cabinets—geological, natural, historical, conchological—libraries, scientific apparatus of the finest mechanism, and a faculty of 16 accomplished educators, it is but a natural result that the Western University of Pennsylvania should have achieved its present prominence. The faculty and board of trustees are composed of representative men from various denominations: Wm. Thaw, Hon. J. K. Moorhead, Wm. Frew, Jas. Park, Jr., Dr. C. G. Hussey, Rt. Rev. J. K. Kerfoot, Rt. Rev. D. R. Kerr, D. D., Hon. F. H. Collier, John Harper, Esq., and others serving in the latter capacity. On the other hand, perhaps the most useful institution for the proper education of women, in this community, sprung from the well-directed efforts of the Methodist denomination in the establishment, a quarter of a century ago, of the Pittsburgh Female College, which was chartered by special act in 1854. This school, which has undoubtedly done much to promote a high degree of female culture, is under the immediate direction of Rev. I. C. Pershing, D. D., for 20 years president of the faculty, and the contingent supervision of a board of trustees composed of 24 gentlemen of the highest standing, presided over by the Rev. Bishop, M. Simpson, D. D., one of the brightest luminaries of the Methodist denomination. The course of study pursued at this institution embraces not only those branches pertaining to the solid resources of the human mind, classic and modern languages, English literature, mathematics, moral and mental philosophy and the natural sciences, but includes instruction in those polite accomplishments which are almost as essential. In this department a conservatory of music forms a prominent feature, and an art school for culture in drawing, painting and plastic art, affords more than ordinary advantages. Established upon the highest principles of usefulness, as a primary design, without thought of pecuniary advantage other than essential to perpetuate the college upon a self-sustaining basis, the school has become a prominent institution of learning, and pre-



Pittsburgh Savings Bank.

sents advantages in a numerous faculty, of exceptionally solid attainments, and terms of marked moderation, that attract pupils from all sections of the country. Under the ægis of the Episcopalian denomination, the Bishop Bowman Institute, a collegiate school for young ladies, has assumed a prominent position among the educational establishments of the State, taking a high rank on the score of broad usefulness and able management. This academy has been established for about 17 years, its aims being to impart a "thorough and liberal Christian education," more than usual attention being directed to the solid branches of academic culture, and the discipline of the mind to effective and original action. To these aims the school has proved adequate in a marked degree, a success due in no limited measure to the labor and influence of the rector, Rev. Robert J. Coster, M. A., and a faculty of rare scholastic accomplishments. The institution was chartered in 1866 by the State, and is under the contingent supervision of a board of trustees, the chief executive officer of which is the Rt. Rev. John Barrett Kerfoot, D. D., LL. D., whose official visits to the school and lectures on moral philosophy and the evidences of Christianity, lend additional advantages of a high order to those already enumerated.

The Pennsylvania Female College is another denominational school for the education of young ladies, as its name implies, under the especial protection of Presbyterian sponsors. The organization was chartered in 1869, and the buildings, which are remarkable for beauty and magnitude, finished and occupied in 1870, from which time the academy has been educationally successful. In this connection it would be extremely ungracious to omit mention of one of the most admirable as well as useful educational institutions in the country, viz., the Pittsburgh School of Design for Women. This art school was organized and incorporated in 1865, with the object of affording greater opportunities for the education of women than heretofore possessed, and presenting them all the advantages to be derived from a systematic training in the technical as well as theoretical knowledge of art. Its mission was a high one, but it has already accomplished a noble work among its graduates, being found able, and, in many cases, talented artists, and competent instructors in fine art, designing, architecture, mechanical drawing, &c. The school is mainly dependent upon the voluntary contributions of those interested in the work, and affords a worthy channel for the wisest benevolence and public spirit. The officers and directors of the school are among the most prominent and esteemed members of the community, and the faculty consists of Annie W. Henderson and Olive Turney, who were among the first graduates in 1871. In speaking of matters connected with art and the general educational advantages of Pittsburgh, the Art Society should



Pennsylvania Female College. (See page 227.)

not be forgotten, being an institution highly promotive of culture in music, painting, literature and plastic art. This association was organized in 1872-3, Rev. S. F. Scovel, D. D., being the first president—Wm. R. Thompson, Esq., having occupied this position for some years, being at present the chief executive officer. One hundred members are enrolled upon the books of the society, many of whom are noted musicians, artists and *literati*, or representatives of the highest intellectual cultivation of the community. The meetings are held semi-monthly during the Winter in the gallery of the Pittsburgh Library Association, and afford means for instruction and entertainment of the most attractive and elevating character.

The above reference to the Pittsburgh Library Association suggests this valuable public institution, which has perhaps filled as wide a field of usefulness in the promotion of general education as any similar organization in the western portion of the State. Founded in 1847, the society has numbered among its officers gentlemen of the highest social position, of commanding influence and ability, who have given no little time, labor and talent to foster the intelligence of the community by the establishment of this library upon a substantial and permanent basis. That its condition at the present time more nearly approximates this standard than ever heretofore is mainly due to the tact and energy of Mr. William N. Riddle, who, as president of the Association during the past two years, was greatly instrumental in organizing two brilliant semi-social schemes—the Bazaar of Nations and the Library Loan Association—from the profits of which the library has been placed upon an excellent footing. From the report of the librarian it appears that over 15,000 volumes are now upon the shelves of the institution, with a rapid annual ratio of increase greater than in the past. The officers of the Association, incumbent at the present time, are as follows: Wm. N. Riddle, President; Alexander Laughlin, Jr., Vice-President; Wm. H. D. Barr, Secretary; Wm. Thaw, Jr., Treasurer; Directors, Fred. Rinehart, T. Brent Swearingen, S. George, Jr., W. L. Chalfant, W. P. Schell, Jr., and Willis L. Eaton. The building occupied by the library was built expressly with a view to its proper accommodation, and is one of the most splendid and sumptuous structures in Pittsburgh, the main hall of the library being perhaps the handsomest apartment for the purpose in the country, elegantly furnished, with appointments and embellishments of great artistic merit and beauty. Though this library is not entirely free to the public, yet the annual charge for membership is so small as to place its advantages within the reach of all who desire to embrace them, the number inscribed upon the rolls of membership at present being between 1300 and 1500, with every indication of rapid augmentation. The library hall building, while, as before remarked, being built mainly with a view to the advantage and accommodation of the library, was the work of the Library Hall Company, a joint-stock corporation, organized in 1869 for the special purpose indicated. This company, though entirely distinct from the Pittsburgh Library Association, really emanated from it, and succeeded, through the capital and interest contributed by members of that Association, in the admirable accomplishment of its design. The existence of the library hall building is a powerful confirmation of the above statement, and, as before remarked, is one of the most sumptuous structures in the country. It was erected at a total cost of \$290,000, the materials employed in the construction of the facade, which is extremely unique and beautiful in architectural design, being gray stone, while the whole ponderous edifice is solidly and accurately built. Besides containing choice and spacious apartments, halls, galleries, ante-rooms, &c., &c., for the library, the building contains the finest public hall in Pittsburgh, capable of seating 1400 people, elegantly furnished, and suited in scenery and stage appliances for dramatic, operatic and other exhibitions, concerts, lectures, &c., and is by all means the favorite hall for such and kindred purposes. In addition to this, the building is fitted with an art gallery and music room, properly lighted from the top, and in every way adapted to the purposes for which it was designed. The first or ground floor and basements are devoted to trade purposes, resulting in a handsome revenue from this and all sources. Charles J. Clarke, Esq., is president of the company, in connection with which, as directors and officers, will be found many of our first citizens.

Allegheny City is also supplied with a copious library, which is maintained entirely at the public expense and by voluntary contributions, ample rooms being provided for it in the municipal buildings. In Allegheny is also located the Western Theological Seminary of the Presbyterian Church, which was established in 1831, the college building being first located on what is now known as Seminary Hill. This structure, however, was destroyed in the Winter of 1854, and the present structure erected in 1855 on Ridge Avenue, being a large and commodious building. For more than a third of a century this celebrated Seminary has been the focal point in the West, as Princeton in the East, for the education of clergymen of the Presbyterian denomination, and has performed a great work through this means in the evangelization of the country. It appears that, under the regulations governing this college, *no charge is made for tuition or room*, and all other expenses are so modified as to meet the most limited means, making it possible for any earnest and resolute pupil to graduate at an expense within compass of the narrowest resources. The faculty consists of six eminent divines, as follows: Rev. Samuel Jennings, D. D., LL. D., Rev. Wm. H. Hornblower, D. D., Rev. William H. Jeffers, D. D., Rev. Samuel H. Kellogg, D. D., Rev. Benjamin B. Warfield, A. M., Rev. Luther Halsey, D. D., LL. D.; the trustees, directors and other officers being among the most prominent in the clerical or lay society of the denomination.

In its provisions for the poor, unfortunate, sick, criminal, or insane, Pittsburgh has given the most striking assurances of being possessed of an active philanthropy that has not been surpassed

by any community in America. In attestation of this assertion, it may be well to point out a few of the most prominent charities for the benefit of those at a distance, to whom it is desirable to convey a just conception of Pittsburgh as it is in every material or social aspect.

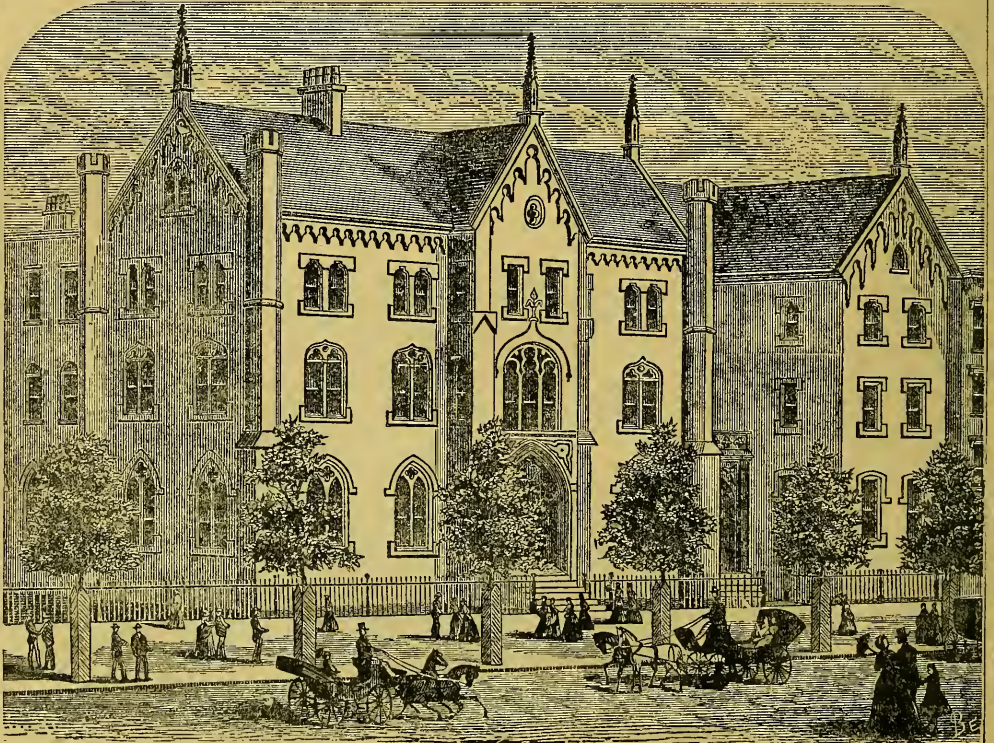
The Western Pennsylvania Hospital for the Insane, located at Dixmont, eight miles from the city over the P., Ft. W. and C. R. R., is perhaps one of the best conducted and most useful institutions of this character in the country. The buildings are vast and complete, so far as human ingenuity and unlimited means can devise or produce, costing in all nearly \$1,000,000. Surrounding the main structure lies a domain of 320 acres, the State, cities and various counties in West Pennsylvania contributing to its support by appropriation, or a charge exacted for the care and maintenance of patients from the various localities.

The Homeopathic Hospital is an institution emanating exclusively from the benevolence of those believing in the superior efficacy of this school of medicine; nor has it received the aid to which it is entitled by the State, though its advantages are provided gratuitously for the indigent, who are supplied with attention, medicines, treatment, maintenance and surgical care during their entire requirements. The institution was incorporated in 1866, under the title of The Homeopathic Medical and Surgical Hospital and Dispensary of Pittsburgh, and from that period has been sustained entirely by voluntary contributions. The board of trustees includes the names of many of the most prominent and liberal men in the city. The medical board consists of one consulting physician, four surgeons, four physicians, two obstetricians, and ten dispensary physicians—21 medical men in all, representing the highest efficiency in the homeopathic practice of medicine.

The Pittsburgh Infirmary, which owes its existence to the philanthropic efforts of Rev. W. A. Passarant, is another institution designed to afford relief for the sick and unfortunate. It was founded in 1848 and chartered two years later, performing from its first establishment a noble work in the aid freely bestowed upon those appealing for help, regardless of race, creed or condition.

The Mercy Hospital, though under the charge of the Sisters of Mercy, is equally broad in its provisions for the sick, and affords admirable facilities, the buildings being large and very commodious. The solicitude of the Sisters has made this institution widely useful and entitled to the general consideration in a marked degree.

Besides the foregoing, there are numerous other benevolent establishments, whose names will briefly convey an idea of their purposes without further description: Home for the Friendless, designed for destitute children; Allegheny Widows' Home; Home for Aged Protestant Women; The Home for Destitute Women; Boarding Home for Working Women; The Sheltering Arms, a



Pittsburgh Female College.—See Page

reformatory and home for unfortunate girls and young women; Home of Industry; and Home of the Little Sisters of the Poor; besides two orphan asylums being under the charge of the Sisters of Mercy, who richly deserve the title by which they are known. There are also two other orphan asylums and an institution for the education of deaf and dumb children.

The municipal arrangements for the support of what may be called the pauper portion of the community are admirable, and by the conjunction of farms, which are worked mainly by the inmates of these establishments, they are made, to a great extent, self-supporting, thus relieving able and provident citizens from an onerous load of taxation for the maintenance of the poor. These observations are particularly appropriate to the Pittsburgh poor farm, which is located at Homestead, on the Monongahela river, about eight miles from the city, and has been, for the past two or three years, under the excellent and systematic management of Mr. G. L. Braun, who has, during his incumbency as superintendent, not only made many improvements conducive to the health and comfort of the inmates, but, by judicious economy and the high cultivation of about 90 acres of arable land pertaining to the domain, has reduced the cost of the actual maintenance of each inmate to the sum of 20 and four-sevenths cents per day, or considerably less than that required by any similar institution in the State. The property, in all, attached to this almshouse, is about 149 acres, and it is reasonably assumed that, with 150 acres additional and a management equal in efficiency to the present, the entire establishment might be made self-supporting. A valuable and necessary addition is being made to this institution by the erection of a separate and suitable building for the accommodation of the insane and demented, for the proper care of whom no adequate provision is possible with the present limited room and between 300 and 400 inmates, varying with the seasons. This structure is a three-story brick building, 48x195 feet, designed by T. D. Evans, architect, and constructed in the most substantial manner, being particularly remarkable for the introduction of the most perfect system of heating and ventilation ever devised, and extraordinary moderation in cost, which, for a municipal building, is the occasion of very favorable comment.

The Pennsylvania Reform School, at Morgantown, on the P., C. and St. L. R. R., a short ride from the city, is another of those splendid charities for which our city is becoming noted. This institution was established in 1834 as a House of Refuge, where the young and vicious of both sexes might, by compulsory training and education, be brought into a better moral and intellectual condition, fitting them for useful and responsible positions in society. With this object, a large building was erected near the lower part of Allegheny City, where, until 1876, was pursued what is called, in reformatory parlance, the "congregate system," part of which required the restraining influences of bolts, bars, walls and donjon keeps. In conformity with more modern ideas, however, and the introduction of methods requiring the abandonment of physical restraints, the establishment of the school at Morgantown upon the "family system" was projected. In pursuance of this plan, over 500 acres were purchased at the above place and six separate buildings erected—one main and five family dwellings, the plans approved being those furnished by E. M. Butz, Esq., architect. These buildings resemble, in external appearance and internal appointments, the best class of the largest private dwellings, except the female department and main structure, which are of greater dimensions. Over half a million dollars was spent in the execution of this project, the wisdom of which is not questioned. About 320 inmates are now being educated and maintained by the institution, which came formally under the sole control of the State during the current year. Upon the abandonment of the old structure before referred to, that building was conveyed to the State, and is now undergoing changes, alterations and extensions, on the basis of plans designed by E. M. Butz, by which it will become a detached part of the Western Penitentiary.

Much could be said in this connection of the truly civilized mode of conducting our penal institutions, the workhouse at Claremont being a remarkable illustration of the beneficent effects of a conjunction of salutary, useful and profitable labor and moral restraint, leading not only to the improvement of the convict in every respect, but the maintenance, to a great degree, of the institution upon a self-supporting basis.



White Lead Works on Rebecca Street, Allegheny. (See page 143.)

These are a few of the most prominent of those organized efforts for the improvement of the needy, the instruction of the ignorant, and the care of the destitute or criminal, for which Pittsburgh is entitled to the esteem of the humane; in addition to which there are fruit and flower charities, societies for the prevention of cruelty to children or animals, an association of bankers and bank clerks, for mutual benefit and assistance, of which Mr. Wm. N. Riddle is president, an influential club for the preservation of the fish and game of the State, law and order societies, and numerous other institutions, supplying special needs, or in the performance of noble work, evincing the vital operations of an active public spirit, greatly conducive to the social welfare of the whole community.

In proportion to its population, it has been frequently asserted that Pittsburgh supports more daily newspapers than any other city in the country, nor has any advance agent of any company, providing exhibitions for the public, been found willing to controvert this statement; such, on the contrary, vehemently endorse the truth of the allegation, sometimes profanely and sometimes tearfully, as they gerrymander from one office to the other. In any event, Pittsburgh is well supplied with journals, the general standing of which is nearly all that could be desired. We shall mention, briefly, in the order of seniority, the most prominent:

THE COMMERCIAL GAZETTE, now conducted by King, Reed & Co., was established in 1786 as the Pittsburgh *Gazette*, and, by the purchase of the *Commercial*, in 1878, effected a consolidation of the two papers, by which the title was appropriately changed to the present style. This morning journal is the organ of the Republican party in Western Pennsylvania. It has a large circulation—is ably conducted, especially with reference to politics and mercantile affairs, producing a handsome revenue, and exerting an active influence upon all questions of public import. A weekly edition is also issued.

THE EVENING CHRONICLE was founded in 1841 as a morning paper, but was subsequently changed in 1848 to an evening journal. It is now and has been for many years owned and published by Joseph G. Seibeneck, Esq., who conducts it independent of politics, but not without a distinctive and conservative policy. As a family journal, this paper has a large circulation, and is a general favorite with all classes of the community, especially long residents in this section. The weekly edition forms a valuable addition to the journals of the city.

THE DAILY POST, as the only organ of the Democratic party in Western Pennsylvania, occupies a place peculiarly its own, having an extensive circulation and wielding a strong influence in all matters pertaining to the party of which it is the mouthpiece. It was established in 1842, and has been owned and conducted for many years by James P. Barr & Co. A weekly edition is also issued, which finds numerous subscribers in all parts of the State. The *Post* is ably conducted, and, in a financial point of view, is successful to a marked degree.

THE PITTSBURGH DAILY DISPATCH was established in 1846 by the late Col. J. Herron Foster, and was published at first as a penny paper. In 1865 Daniel O'Neill and A. W. Rook purchased one-half interest in the concern, which was then in no flourishing condition, and in 1867, on the demise of Col. Foster, became sole proprietors. The extraordinary talent for journalism, political acumen and business ability possessed by Mr. O'Neill soon caused the paper to assume a foremost place among local publications, and in a short time the *Dispatch* became the leading representative journal of this end of the State. The aggressive vigor with which it was conducted resulted in a circulation of from 13,000 to 14,000 daily, and an almost princely revenue. On the demise of Mr. O'Neill, in 1877, Mr. A. W. Rook, the surviving partner, associated with him Mr. Eugene M. O'Neill, under the style of Rook & O'Neill, subsequently changed to Rook, O'Neill & Co., by the admission of Mr. Chas. A. Carroll. The *Dispatch* is independently Republican, politically and is cleverly conducted in all departments, being justly regarded as one of the most influential and profitable journals in Pennsylvania. A weekly issue is published, which has a wide support.

THE EVENING LEADER was founded in 1870 by John W. Pittock, and is now owned and conducted by the *Leader* Publishing Company, which publishes, in addition to the evening paper, a dollar weekly and Sunday issue, the latter having a very extensive circulation, being the largest and best conducted Sunday journal in the city. In politics, the *Leader* is not allied to any party, but is none the less pronounced in its views upon all matters either in church or State. It is popular with a large class of the community—displays ability in its management, and secures a very satisfactory revenue.

THE SUNDAY CRITIC, published by Carson, Haslett & Clark, has been established for some years, and is now settled upon a solid footing. It is Democratic in politics, has a good circulation, and is a well-managed and readable sheet.

THE SUNDAY GLOBE.—This paper is owned and conducted by J. Breen, who has succeeded in making it a vivacious and peppery journal, with a large subscription list, a good advertising patronage, and the other essentials for a healthy and prosperous existence.

The class papers are the AMERICAN JOURNAL OF INDUSTRY, an enterprising and valuable sheet published in the interest of manufacturers by Geo. E. Williams, Esq., and the POTTERY AND GLASSWARE REPORTER, which emanates from the same source. Though founded within a limited period, these journals have attained a pronounced success, and may be justly regarded as representative trade papers and vigorous exponents of the industries of this section.

THE AMERICAN MANUFACTURER is also an excellent paper, conducted in a very circumspect manner.

THE EVENING TELEGRAPH was first published in 1873 by a joint-stock company, which finally surrendered the journal to the control of Ralph Bagaley, Esq., who has conducted it for some years with satisfactory results. In tone, the paper is Republican, and aims to inspire confidence by an honest and fearless course. Its management is in able hands, and the journal is achieving the respect of the community, which is evinced by a rapidly enlarging subscription list. The *Telegraph* has also a weekly edition, and in all respects gives solid proofs of success.

THE ALLEGHENY EVENING MAIL is the only journal published in Allegheny. It has a good circulation—is a spicy little sheet, and is conducted editorially by Mr. John B. Kennedy.

Besides the above English, there are three German dailies, the most important of which is the FREIHEITS FREUND, owned and published by Messrs. S. and W. Neeb. It is the Republican organ for the Germans, and is an official paper for both cities and the county. It is conducted with a large share of financial success. The other German papers are the VOLKSBLATT and REPUBLIKANER.

The religious element of the community contributes to the success of several denominational journals whose names are indicative of general characteristics: THE PRESBYTERIAN BANNER, THE METHODIST RECORDER, THE PITTSBURGH CHRISTIAN ADVOCATE, the organ of the M. E. Church, THE UNITED PRESBYTERIAN; THE CATHOLIC, and others, published weekly.

THE HARDWARE REPORTER, published simultaneously at Pittsburgh, Cleveland and Chicago, and the AMERICAN MANUFACTURER AND IRON WORLD at Pittsburgh and New York, published by the National Iron and Steel Publishing Company, are the leading publications of the nation, representative of the iron and hardware trades. The manager and treasurer, Mr. Frank Woods, is one of the most thoroughly posted and ablest trade journalists in the country. To the iron and steel manufacturer, to the dealer, to the hardware merchant, whether the extensive importer and exporter or the retail dealer, either *The Hardware Reporter* or the *American Manufacturer* should be their weekly visitor. Address National Iron and Steel Publishing Co., 97 Wood Street, Pittsburgh.

Y WASG.—It is estimated that in Western Pennsylvania alone there is a Welsh population of more than 50,000, while in the collieries and iron works of Ohio and the West there are undoubtedly as many more. This large class of Welsh-speaking citizens is fortunate in the possession of a really first-class weekly newspaper, printed in their own language by "*Y Wasg* Printing Company," of which Mr. Jenkin Jones is President; Mr. Joseph D. Jones, Vice-President; Mr. Thomas W. Davis, Secretary; Mr. D. W. Lloyd, Treasurer; and Mr. R. T. Daniels, Managing Editor. *Y Wasg* is a neat and attractive eight-page paper, ably edited and conducted in the interest of the Welsh people of this section, whose industry and peculiar qualifications have done so much toward the development of the iron and coal interests of Western Pennsylvania. It is the only Welsh newspaper west of the Allegheny mountains, and, with one exception, the only one published in this country. Its circulation throughout Pennsylvania, Ohio and the West, is large and steadily increasing, and as an advertising medium for those desirous of reaching this class of trade, it is unequalled by any paper in the city.

In this brief summary of the salient points and obvious advantages of Pittsburgh, it has been necessary to condense too much to permit of the production of a sketch that should possess the advantages of a careful literary production; nor was labor in this direction considered necessary or essential. It would have been pleasant to have loitered with the reader round old historic scenes and landmarks of the past—to recall names that have figured in the annals of the nation, and legends that may not be forgotten in connection with almost classic haunts; but the relentless propulsion of our theme and object forbade. INDUSTRY has been the reiterated cry, and for its evidences the reader is referred to the sketches and descriptions of Pittsburgh's laborers and labors, with which this work is replete.

THE PENNSYLVANIA RAILROAD COMPANY.

There is no feature of American progress and enterprise which more favorably impresses the mind of the foreign tourist than the admirable system of railway management, the magnificent coaches, the solid and substantial road beds, and the elegant structures used for depots and stations by the great railroad corporations of this country. In all these departments the Pennsylvania Railroad Company stands pre-eminently and conspicuously at the head, and the various connections of this company, intersecting with iron bands nearly every section of the Union, furnish means of communication for business men and pleasure seekers at once, the most direct, the most picturesque and beautiful, the most convenient and the most comfortable of any road in the world. Railways being now the common highways of the land, the managers of the Pennsylvania Railroad Company have made every effort, in their power, to accommodate the traveling propensities of the restless and progressive people by well equipped and pleasant routes extending throughout the varied and interesting scenery of the Middle, Eastern, Northern and Southern States of the Union. The numerous and widely diverging lines of the company, following the course of beautiful rivers, penetrating the fastnesses of giant mountains, reaching the restless waves of the mighty ocean, and meandering through romantic vales and sylvan scenes of breezy heights, reaching from the home of the pilgrim fathers and the earliest settlement to the great and growing cities of the West, afford facilities for sight seers and pleasure seekers unrivalled on the continent and unsurpassed by those furnished by any other company in the world. By arrangements recently completed, the Pennsylvania Company is now prepared to furnish excursion tickets at special rates to and from almost every prominent point of interest on the continent at greatly reduced rates. This company has general ticket offices in all the principal cities of the Union, presided over by affable and accommodating gentlemen, who are always happy to furnish full and explicit information to travelers relative to the various routes controlled by the company, and an elegantly illustrated work on Summer Excursion Routes has been carefully prepared under the supervision of competent writers, which will be furnished upon application at the different offices, and which will be found an indispensable *vade mecum* to pleasure seekers and summer tourists. The main offices of the company are located in Philadelphia, Mr. Frank Thomson, general manager; Mr. L. P. Farmer, general passenger and ticket agent; Mr. Chas. E. Pugh, general superintendent.

The general ticket office of the Western district is located at No. 78 Fifth avenue, cor. Smithfield street, Pittsburgh. Mr. Robert Pitcairn is the general agent and superintendent for this division. All the gentlemen connected with this company are noted for their ability in the various departments in which they are engaged, being selected solely with an eye to their fitness and general qualifications.

BEAVER FALLS.

This thriving and prosperous town with her varied industrial establishments, as being closely identified with the great manufacturing interests of Western Pennsylvania, is worthy of most favorable consideration in these pages.

On the banks of the Beaver River, that at this point sweeps in a graceful curve along the base of the eastern hills, that rise abruptly from its borders to a height of 100 feet or more, in a broad, beautiful valley, sloping back to a range of hills on the west, along whose base the P., Ft. W. & C. R. R. bends, this attractive and growing young city, that dates her foundation back but a half score years, is situated. A more beautiful spot for a city is seldom seen, by her gifts Nature having been very bountiful to this favored place. In addition to the beauty of the scenery and attractiveness of the situation, its healthfulness, etc., one of the finest water powers in the country is here afforded. In the hills that surround the place are stored inexhaustible supplies of coal that is easily mined and transported to the places of consumption. The hills are covered with large quantities of timber of various kinds of hard wood, that are valuable for many purposes. The surrounding country is one of the finest agricultural districts in the state, by which abundant and cheap supplies of food for the busy thousands, who in the varied workshops are producing the many articles that find markets in all parts of the world, bringing wealth, contentment and happiness to her homes, is assured. Proximity to the sources of supply of raw materials is another advantage enjoyed.

Numerous coal pits are opened into the adjacent hills and an abundant supply is brought forth. The Water Power was secured by building dams across the Beaver River, which in all seasons affords an abundant and never failing supply. The dam at this point was built in the construction of the P. & L. E. Canal many years ago, a fall of 20 feet or more is obtained, and this great natural power is utilized by a large number of factories that line the banks of the river in the vicinity of the race, and there is yet abundant room for other establishments. By the completion of the new P. & L. E. R. R. a competing line is now had to all parts of the country, a consideration in these days of Railway monopolies and discrimination of the greatest importance. The Ohio River is distant but 2½ miles, by which connection is had with the great natural highways of the West.

The manufacturing interests that have been attracted here in the short period of her growth are of a greatly diversified character—embracing a number of the finest establishments in their particular branch of industry in the United States, and which are remarkable, in many respects, for their splendid equipment, the superiority of their products and the great success they have attained. Mention of each separate industry is given in detail in these pages. The town is abundantly and inexpensively supplied with water by the Holley system, the engine being driven by a 42-inch water wheel with a capacity to supply four times the quantity of water now required. Fire plugs are distributed throughout the city, the pressure being sufficient to throw water to the tops of the highest buildings. A fine reservoir, with fine storage capacity, has been constructed, from which the water after being filtered is distributed throughout the mains. The Fire Department is well equipped with a steamer, Babcock engine, an abundant supply of hose and other apparatus, and has proved to be very efficient. The town is well lighted, numerous gas lamps being erected along the streets.

A spirit of enterprise and improvement pervades the whole place and progress seems to be the watchword with all. The water power, which is now very fine, is proposed to be enlarged by the building of another dam with 30 feet fall, that will give a tenfold increased power and afford abundant facilities for largely increased manufacturing interest that is being attracted to this point by the great advantages afforded. A new iron bridge, 700 feet long, is in process of erection by the Penn Bridge Works of this place across the Beaver River, at the upper end of the town, that will bring a large and wealthy agricultural district in direct communication with it and prove of great advantage to the mercantile interests of the place, which are already of a greatly diversified nature.

The natural beauty of the place, its healthfulness and central locality, have been the important considerations in the selection of this point for the location of the Reformed Presbyterian University, which will be removed from Geneva, O., here, where the Harmony Society have generously donated them 10 acres of beautiful ground most admirably located.

CHURCHES.

There are now 8 churches in the town, some of them very handsome and substantial structures, —two Methodist, two Presbyterian, one Reformed Presbyterian, one Episcopalian, one German Lutheran, one Evangelical.

A handsome Public School building is situated near the centre of the town. There are many fine and substantial business houses located on Main street, and many fine private residences in different parts of the place. The streets are admirably laid out, are wide and airy, and the neat and attractive cottages of the busy artisans who find employment in the various manufactories, surrounded with shrubbery and flowers, present a picture of contentment and happiness that is foreign

to the dwellings of the toiling millions in some of the great manufacturing centres. The population is estimated at from 6000 to 7000, and will scarcely fall short of the latter figure. The distance to Pittsburgh, with the interests of which this place is intimately connected, is but 30 miles by rail.

It is appropriate, in connection with this review of Beaver Falls of to-day, to glance at some of the causes that have contributed to the wonderful growth of the place, aside from the many natural advantages briefly mentioned above, and the men whose foresight, energy and public spirit have been the means of attracting to this point the industries that have built up the place and the name of Beaver Falls known throughout the world as a great industrial centre. The property upon which the town is now built, something over ten years ago, came into possession of the Harmony Society at Economy, a community of people, who perhaps will be recognized more generally under the name of the Economites, who, for many years, have been located a few miles from the place in a town built by themselves, called Economy, and who, by their industry and frugality, have accumulated great wealth. Having loaned a large amount of money secured by mortgage, they were eventually compelled to take the property, which they were desirous of selling; failing to secure a purchaser for it at what they considered its value, Messrs. Baker and Henrie, Trustees of the Society, decided to lay out a town and sell the property off in lots. The services of the men to whose energy and abilities perhaps more than any other cause is Beaver Falls indebted for her position to-day. Messrs. H. T. & J. Reeves were called into requisition, and the property placed in their hands as Agents for the Society. These gentlemen had been previously recognized as among the most enterprising and reliable Real Estate operators in this section, and realizing the great mutual advantages of the place for manufacturing purposes and the advantages to be derived from the establishment of industrial interests on the property, directed their efforts toward inducing manufacturers to locate in the town, to whom the liberal inducements were extended as well as material aid by the Harmony Society. Among the first establishments to locate here was the cutlery works, which was originally started in Rochester, a few miles below this place. Messrs. Reeves induced the proprietors to remove to Beaver Falls, where other enterprises have rapidly followed, generously fostered and encouraged by the liberal policy of the Harmony Society, guided by the wisdom of Messrs. Henrie and Lenz, Trustees.

Messrs. Reeves and Judge Hice, the able counsel of the Society, have been the active instruments of building this thriving young city, which, guided by their wisdom and aided by the abundant capital of the Society, has risen to such solid proportions in the short period of 10 years, and as these gentlemen are still actually guiding the varied interests of the place, and pushing with characteristic energy every enterprise that could tend to increase the prosperity of the town, and overseeing their aim, and the great interests of the society, in their connection with the various industries located here, must naturally feel great gratification as they look upon the wonderful results of their well directed efforts. Possessing so many natural advantages, encouraged and fostered by the far-seeing and liberal policy of the patrons of the place, no place in the United States offers more inducements to manufacturers than Beaver Falls, whose future must be as brilliant as it will be enduring.

ALGEO BURIAL CASKET WORKS,—W. G. Algeo & Son, Beaver Falls, Pa.

These fine and excellently equipped works were established by Messrs. Algeo & Son in 1874, and have been in the enjoyment of a prosperous and growing trade since their beginning. They are admirably located on the banks of the Beaver river, supplied with abundant water power by which the machinery is driven. They are fitted with complete and perfect machinery, and are in every respect most conveniently and systematically arranged. The building, which was built with a view to the requirements of the business, is 40x100 feet in size, 2 stories high, and in all respects is a most pleasant and convenient establishment, representing an investment of \$26,000. The product of the establishment, Burial Caskets, Coffins, etc., have attained a wide reputation for their superior make and fine finish. Their trade is derived mainly from the Eastern cities of Baltimore, Washington, Philadelphia, Buffalo and Rochester, N. Y. A patented improvement, the invention of the Algeos, is used on all their coffins and adds greatly to their popularity. It consists of a rim forming an inside finish arranged for neatly and quickly attaching the linings thereto. This improvement has met with high appreciation by undertakers everywhere, and has tended largely to give Algeo's Coffins their high reputation over all other makes. A steady and increasing demand keeps his works constantly in operation, giving employment to 20 hands, with a monthly pay-roll of \$1,000. This firm are also manufacturing a sand-papering machine of their own design, having originally built one for their own use and finding it to surpass any machines heretofore made, and costing only about $\frac{1}{3}$ as much. They have commenced the manufacture and sale of them, and are meeting with a flattering number of orders. It will be better appreciated when it is stated that the machine, which is now sold at \$150, can do as much and as perfect work as the \$450 machines, and are simpler and more easily kept in order. U. Baird, 73 Water st., is the Pittsburgh agent for the machines, where samples can be seen. Mr. W. G. Algeo is a native of Allegheny, born in 1830, he learned the trade of cabinet maker early in life, with the old firm of T. B. Young & Co. of that city. Prior to engaging in his present prosperous enterprise he was engaged a number of years in the furniture business in Pittsburgh. His son, the junior member of the firm, was born in Pittsburgh, and has grown up in the business with his father, acquiring a thorough knowledge of it in all its details. Enterprising, prompt and reliable the firm of W. G. Algeo & Son occupy a leading position among the manufacturers in their line and can present advantages to the trade not easily duplicated by contemporaneous establishments.

ST. CHARLES HOTEL, COLUMBUS, O. James C. Dunn, Proprietor.

Popular Prices,—\$2.00 Per Day.

The most centrally located hotel in the city. Street cars pass the door every five minutes to all the depots and all parts of the city. The superior excellence of this elegant hotel will be sustained as heretofore. Its central location is unsurpassed, being convenient to all retail stores, and all places of amusement.

BEAVER FALLS CUTLERY CO.—Beaver Falls, Pa.

H. T. Reeves, President. Jno. Reeves, Sec'y. and Treas.

In the whole range of this work, reviewing the great and wonderfully diversified industries of this State, there will be found no more noted establishments any entitled to more favorable consideration in these pages than the one forming the subject of this sketch. The enterprise was founded on a comparatively limited scale in 1867, originally as a private company. Dr. C. G. Hussey, Hon. T. M. Howe and other prominent gentlemen being connected with it, among the number Mr. Jas. W. Brown, who was President of the company for a considerable time and largely contributed by his talents towards placing it on a successful basis at the start. In 1870 the concern was changed to a joint-stock Co., the ownership passing largely into the hands of the Harmony Society. Mr. Henry T. Reeves was elected President, and Mr. John Reeves Sec'y. and Treas. Under the able and enterprising management of these gentlemen, assisted by Judge Hice of Beaver, the industry has grown into its present grand proportions. The obstacles that had to be overcome in placing the institution in its present prosperous condition can scarcely be appreciated by those not having had experience in such matters, and would have disheartened less resolute men than those who were fortunately at the head of it. Among many others, the procurement of skilled labor was one of the earlier difficulties met with; for a period of 4 years a force of Chinamen were employed, who, in a short time, became proficient workmen and rendered entire satisfaction to their employers. The overcoming of the prejudice existing against American cutlery, was a task of still greater difficulty and years of patient effort were required to convince the public that American manufacturers could produce as good an article as any in the old world. This has been done, and foreign cutlery is rapidly disappearing from our markets, which are being abundantly supplied with the products of American skill and of a quality that bids fair to surpass in the near future, the finest goods of the English makers. These works are situated near the Beaver River, and in close proximity to the P. & L. E. R. R. and the P. Ft. W. & C. R. R. The buildings, which are built of brick and stone in the most substantial manner, covering an area of 2 acres, were specially designed to meet all the requirements of this industry, and are as finely equipped and arranged as any similar establishment in the world, and in the possession of a quantity of patented and greatly improved machinery and processes of manufacture are in this respect much superior to all others. The products of the establishment consist of all grades and kinds of table and pocket cutlery, from the commonest to the finest kind, Butcher and Carving knives, etc., have attained a high reputation for superiority that is fully merited and that has created a demand that is taxing the full capacity of the works to supply. A new department is now (1879) being inaugurated for the manufacture of Solid Steel Scissors, a number of skilled workmen having been secured for this branch of work, and ere long the Beaver Falls Scissors will be on the market, and will doubtless speedily win their way to public favor by their excellent quality. The Steel employed in the production of their table Cutlery is made at the steel works of this place, which have been run principally in connection with the cutlery works, and is rolled under a patented process exclusively owned by the Co., by which the bevels of the knives and forks are perfected on the long strips of steel as they are rolled into shape, the blades being perfected by this single operation, thus obviating all necessity for forging each blade separately as is done in other establishments, and securing perfect uniformity and great improvement in quality of the blades. The reheating, hammering and tempering by the ordinary method which tends to lower the quality of the steel by the burning out of the carbon, is entirely done away with by this process, which has greatly improved as well as cheapened the products of these works. The strips, after coming from the rolls, bear the marks of the blades, which are simply cut apart by shears, when they are ready for the grinder and polisher. 200 of these blades can be rolled per minute, and the capacity of the Cutlery Co. is equivalent to 1200 dozen of their finished goods per day, boxed ready for the market. Although fitted with most perfect machinery that inventive genius can devise, most of which is peculiar to these works, 250 to 300 skilled operatives are yet employed in the cutlery works. Their goods are distributed to the trade from the great trade centers, Philadelphia, Chicago, New York, Pittsburgh, etc. This sketch of these celebrated Works would be incomplete without mention of the Great Knife and Fork, the largest ever made in the world, and which are marvels of mechanical skill and beauty. The entire knife is 9 feet and 7 inches, and width of blade ten inches. The Knife and Fork cost in production more than \$1500. The handles are of solid ivory, each using an entire Elephant's tusk, they are perfect specimens of the carver's art. The blade, which is polished like a mirror, is beautifully and artistically etched, and among the beautiful designs contains an excellent portrait of Ex-Gov. Hartranft. It would require a man 9 feet square and forty-eight feet high, whose weight must be 100,000 lbs., to gracefully manipulate the steel. The work was all done by the regular employees of the company. Mention should be made also of the great improvement in fuel that has been attained by the boring of a well in the vicinity of the works, from which an abundant supply of natural gas is obtained, by which the works are lighted and heated. The heat supplied by the gas is much more even and under more perfect control, and is free from sulphur and other deleterious substances that interfered with the perfection of the goods that is now obtainable. Both steam and water power is employed in driving the machinery. The trade mark of the establishment is a very appropriate and suggestive one. A prostrate lion, on which the eagle with outstretched wings is proudly standing. Mr. H. T. Reeves, the President of the company, gives his personal attention and supervision to the entire business management of the establishment, in which he is assisted and advised by Mr. John Reeves and Judge Hice. Not alone for the production of a class of goods superior to that produced elsewhere in the world, and the great advantage they are able to present to the trade in their products is the Beaver Falls Cutlery Co. entitled to consideration, but the grand results that have been achieved, and the victory gained for American Industry and the overthrow of English competition entitles the Beaver Falls Cutlery Co. and the enterprising and talented men to whose perseverance and skill the accomplishments of these results are due, to high praise and great consideration at the hands of the American people.

CO-OPERATIVE FOUNDRY ASSOCIATION,—Beaver Falls, Pa.

Among the many successful and prosperous Industrial and manufacturing establishments in this enterprising and thriving young city, the Co-operative Foundry Association occupies a prominent position. The enterprise was founded in 1872, and under the able management that has guided its affairs, has attained a prominence in their line of products highly gratifying to the association. The main products of the establishment consist of a variety of Cook and Parlor Stoves, Hollow Ware and fine Castings of all descriptions. The plant of the association is large and well equipped, consisting of 2 large buildings, 30x172 feet each in extent, and Warehouse 45x60 feet. All good, substantial buildings erected with an especial view to the requirements of the business. The machinery and appliances, with which they are fitted, are of most approved and valuable kinds. The motive power is supplied by a fine engine. The whole establishment in all its departments is conveniently arranged and adapted to the work done, and is in charge of thoroughly experienced and practical men throughout. The products of the establishment have attained a wide celebrity for their many excellent qualities and handsome finish. Their trade is quite extensive, reaching over the greater part of the West and throughout this State. The high quality of their products are bringing them a largely increasing trade from year to year, and their works are taxed to their full capacity to meet the demand. 30 hands are employed, to whom \$1200 monthly is disbursed. The management of the Association is in the hands of well-known enterprising gentlemen, who are pushing the industry with commendable energy. The business is managed by a board of Directors, consisting of James Todd, Pres't, Gawn Ward, Treasurer, Henry Miller, Secretary, Thos. Christian, Henry Doffert, L. M. Armor, W. Shaner. Mr. Todd is a native of Pa., born in 1815. He came to Beaver Falls 12 years ago, since which time he has been connected with the foundry from its commencement, having been book-keeper for the Association; prior to that time he was identified with River pursuits, living at Brownsville, Pa. Mr. M. is a native of Beaver Co., he has been connected with the association since its commencement. Mr. Gawn Ward is also a native of this Co. He is a well known enterprising Grocerman, of the place. He does not give his exclusive attention to the business management of the concern. These gentlemen, in their management of the affairs of the association, have largely contributed to its success and popularity. The establishment is in every way reliable and its products rank among the best goods in the market.

WESTERN FILE WORKS, Limited.—Beaver Falls, Pa.

In reviewing the great industries of this section, and giving brief sketches of the notable establishments that spring into existence at the bidding of the genius of progress and enterprise, many instances of remarkable achievements, and the successful accomplishment of what but a little while ago seemed impossible, are met with. And within the range of this whole work, containing accounts of the great and wonderfully diversified industries of this State, it is doubtful, if there will be found a single instance in which American skill and capital have achieved a more signal triumph, than is instanced in the results achieved by the Western File Co., that have grown to be the largest File works in the world. The many triumphs of American Industry have been due mainly to the improved methods of manufacturing and the introduction of labor saving machinery, enabling American manufacturers to compete with the low-priced labor prevailing in foreign countries. It was for a long time thought impossible to devise any machine that could cut a file equal to the hand cut file, for reasons, that it is not necessary in the limits of this article to give. This result has been more than successfully accomplished, as the perfect machinery that is now used by this company, is producing files that have, in many critical tests, been proven superior to the hand made files of the best English brands, and other machine made files. The following extract from the Chicago Commercial Advertiser of June 26, 1879, explains the point of superiority in the machines used: "It is alone for the Western File Co. 'Limited' to say that with their daily capacity of 1000 dozen they combine, in their now perfect machinery, in which they use a loose chisel not in any way fast in or to the hammer, and with as free action as if held with the hand, all the advantages of the hand-cut file with a uniform force, accuracy and perfection heretofore unattained, many of which advantages have had to be sacrificed in all other machines to attain speed. With the use of the loose chisel, which allows the operator to make any shaped tooth desired, the Western File Co. 'Limited,' are enabled to furnish files specially adapted to different kinds of work—for machine filing; for planer knives and the hardest steel worked; for cast iron and other rough usage, and guarantee them superior to ordinary files for such work." Every description of files are made, from the most delicate needle files, for Jeweler's work, to the largest sizes used by machinists, embracing over 1000 different varieties. The products of these works have not only established their supremacy in all the American markets, but are being sold in different parts of the world, from many foreign countries there is coming a steadily increasing demand. They have entered into active competition in European markets with the Sheffield files, are rapidly establishing their superiority there. The magnitude of these works, their wonderful achievements in successfully overcoming combined foreign competition, and sending their products to the very doors of their great competitors, all speak volumes for the skill and ability that has been displayed by the management, who merit the favorable consideration of the country, for the notable victory they have gained for American Industry. These works, before stated, the largest in the world, were founded in 1869 by Blake & Fessenden, and have been in continuous operation since. In 1875, the style of the firm was changed to the Western File Co. 'Limited,' without increase of Capital. The capital stock all paid up is \$215,000. A very large amount of steel is used. All of which is the finest grades to be had and of American make. The works are devoted exclusively to the production of files, and they now have been running to their full capacity, to meet the increasing demand that is being made upon them from all parts of the world. The buildings are very substantial brick structures, consisting of 1 main building, 500 feet long, 2 stories high, having four 1 story wings, another 300 feet long, and two others 60 feet long each, and a number of other smaller buildings adapted to particular uses. They are very eligibly located, enjoying every advantage of cheap and convenient transportation, the P. & L. E. R. R. passing in close proximity, affording every convenience for the receipt of material and the shipment of products. They are in point of equipment the most splendid, as they are the largest works in the world. The most perfect machinery, novel and ingenious, most of which is peculiar to these works, is employed throughout. Another advantage possessed by this Company is the use of natural gas for annealing and other purposes, as the files are not brought in contact with the sulphur and other impurities which all coal contains in a greater or less degree, and which are well known to be injurious to steel. It is also admitted by the best steel workers that the natural gas is very superior for heating, either for forging, annealing or hardening. Throughout the entire works the most thorough system prevails, 150 of their cutting machines are employed. A large number of workmen find constant employment, to whom large sums are disbursed for wages. The "Western" is the most popular brand made. Other brands are made for jobbing houses to order. The following guarantee, which the Company sends out with their goods, should be strong enough to satisfy anyone: The Western File Co., "Limited," guarantees to furnish files, all kinds, and for all purposes, the most superior for both fast filing and durability to any ever made. This is a strong assertion, but it is a fact. The management of the Company has been most liberal and enterprising, and in the grand success that has been attained, they are now reaping the well merited reward of their enterprise.

Mr. Jas. M. Fessenden is Chairman. He is a gentleman of long practical experience in the business. He has general supervision of the manufacturing operations, the various departments of the works being under the immediate direction of skilled superintendents. Mr. E. J. Blake is Secretary, and Mr. F. Fishey, Treasurer. The business management in their hands is conducted with marked ability and success. In every respect these great works present advantages to the consumers of files, that are, perhaps, not equalled by any similar establishment in the world.

BEAVER FALLS MILLS,—Wm. Mellon & Sons, Dealers in Flour, Feed & Grain. Beaver Falls, Pa.

The old Mills, forming the subject of the present sketch, were first established about 75 years ago by some Quakers, who had settled in this country. It was afterwards owned and operated by Mr. James Patterson, a gentleman who was largely interested in this part of the country, for a number of years undergoing some changes and improvements, but being permitted to become badly out of repairs, it passed from the latter gentleman into the hands of W. W. Wallace, Sam'l McCleary, T. Noble, Wm. McKee and some other Pittsburgh gentlemen, who, under the name of the Beaver Falls Mill Co., made many alterations and improvements, substituting new and modern machinery for the old, that had done duty for so long a period and greatly enlarged the capacity. The Mills were controlled and operated by this company for some years, finally passing into the hands of the present firm in 1874, who have successfully operated them since. The firm have enjoyed a large and very prosperous county trade from the surrounding rich agricultural region, and the Mill has heretofore been mainly employed in this kind of trade, grinding all kinds of grain that was brought to its doors. The completion of the new P. & L. E. R. R., which passes in close proximity of the Mill, has greatly interfered with this profitable branch of business, by creating an obstacle to the access to mill of country teams unaccustomed to the locomotive. This necessitated a change in some departments of the mill, which has been promptly made, in order to produce a different quality of flour from that which had formerly been made, which was a good flour, adapted to the county trade enjoyed. The mill is now equipped and is making the new process flour, which, under the brand of the Beaver Falls Mills family flour, enjoys a very high local reputation and is in every way a very excellent flour. The mill is capable of grinding about 500 bushels of grain per day, and the product is all absorbed by the home market. The mill is driven by water power, with a fall of about 19 feet, and having 3 water wheels, with an aggregate power equivalent to 50 horse power. Under its present enterprising management it has been kept in perfect order and improvements added to keep pace with the advance of the age. Mr. Wm. Mellon is a native of Westmoreland Co., this State, born near Greensburg in that county in 1822, and has been engaged in the milling business all his life. His father moved to Beaver Co. in 1816, where the family has resided ever since. Mr. M. is an enterprising gentleman, closely identified with the interests of this growing and prosperous community and is justly esteemed as one of the prominent citizens. Mr. W. A. Mellon is a native of Beaver Co., he has charge of the office and books of the firm, in which position he enjoys the confidence of all the patrons of the establishment.

A. S. & R. W. HALL,—Manufrs. of Buggies, Barouches, Spring Wagons, &c.

Mulberry Street, Beaver Falls.

This enterprising and prosperous firm founded their present industry in May 1875, since when great progress has been made, enlarged facilities created, and an extensive and growing trade built up. The buildings erected by them to accommodate their business are a substantial two-story frame building 26x50 feet, with large basement, and a blacksmith shop 21x50 feet. The capital at first invested was small, but has increased from time to time, until now there is invested from \$7000 to \$8000 in buildings and stock, and an annual business amounting from \$8000 to \$10,000 is done, 8 hands are employed in the manufacture of all kinds of light vehicles, buggies, carriages, coaches, spring wagons, &c. The quality of the work of this firm is equal in every respect to the best work turned out in the country. The gentlemen composing the firm are thoroughly reliable and practical workmen, and will not turn out any inferior work. Their trade has already extended into adjoining counties and states and into Maryland. They are taxed to their full capacity to meet the growing demand that is made upon them. Mr. H. S. Hall is a native of Beaver, born in 1840. He learned the trade of carriage building in the noted establishment of C. West & Co., and after completing his apprenticeship he went into the great establishment of H. Hale & Co., of New Haven, Conn., where he remained two years perfecting his knowledge of the trade. He possesses all the requisites for building a large establishment in the enterprise in which he is engaged. He was a member of the firm of Wusner, Bingham & Hull, of New Brighton, for a period of 3 years, prior to founding his present establishment. R. W. Hall is also a native of Beaver Co., he learned the trade of machinist in Wellsville, O., and followed it until engaging with his brother in their present business, taking charge of the forging and blacksmithing department of the works, as well as devoting his attention to the sale of the products. Both gentlemen devote their personal attention to the manufacturing, and are regarded as in every way a reliable and enterprising firm.

EMERSON SAW WORKS,—Emerson, Smith & Co., Beaver Falls, Pa.

In the entire range of this work, reviewing the industrial interests of the State, no establishment will be found more worthy of consideration, none that has achieved more notable triumphs for American skill and inventive genius, than the Emerson Saw Works, and Mr. J. E. Emerson, to whose energy, talents and inventive genius are mainly due the grand results achieved, is justly entitled to the advanced position he holds among the leading inventors of the age, as well as the high consideration with which he is regarded by the entire county. The present works of Emerson, Smith & Co. were founded in 1871 on a much smaller scale than at present prevails, the rapid growth of the business having necessitated frequent enlargements and improvements which the continued growth of demand for their products still renders necessary, and before long their present very extensive plant will be doubled in size and capacity. All the improvements and additions that have been and are being made are erected in the most enduring manner, the buildings being built of stone in a very substantial way, that will last for generations. They now cover an area of 1 acre of ground, with 2 acres of adjoining ground, that will doubtless in a few years also be utilized in the enlargement of the works and the extension of their facilities. The entire works are fitted with the most perfect machinery that can be devised, which is driven by a fine 60 horse power engine, and is divided and very conveniently arranged into 6 separate departments, consisting of Tothing, Fitting, Smithing and Hammering, Grinding, Tempering and Finishing. The whole being under the direct supervision of Mr. Emerson himself, who, with years of practical experience and knowledge derived from a close study of the requirements of a perfect saw—is perhaps the most scientific saw maker in the world. The establishment now ranks as one of the largest in the U. S. It is most eligibly situated on the banks of Beaver River, with convenient access to an abundance of cheap fuel, having in addition the advantages of a natural gas well in close proximity to the works, which is now being utilized to supply light to the buildings, and is used in some departments of the work for fuel. The P. & L. E. R. R., with convenient sidings, passes in front of their door, affording every convenience for the receipt of materials and the shipment of their products. The entire plant represents an investment of \$75,000. From 35 to 40 hands are employed in the various departments of the works, all of whom are skilled mechanics. Damascus tempered Saws of all descriptions are made, but the main products of the works consist of the specialties below mentioned, viz: Emerson's Patent Planer Saws, for general use; Emerson's Patent Flange Toothed Saws, for general use; Emerson's Patent Clipper Plango Toothed Saws; Emerson's Patent Lumberman's Clipper Saws, Extra thin; Emerson's Patent Universal and Adjustable Saw Swage; Emerson's Patent Labor-Saving Attachment and Twin Clipper Cross Cut Saws, together with the various kinds of insert saw teeth. The above specialties are all the inventions of Mr. Emerson, and are perfectly adapted to the different requirements for which they were designed. At the famous saw contest in Cincinnati in 1874, Mr. Emerson, with one of his saws made at these works, fully demonstrated their superiority over all other kinds, and carried off the purse of \$100 in gold and all the premiums that were awarded, as well as having carried off the premiums at wherever they have been exhibited, for both solid and adjustable test saws. The grand achievements of these works are matters for justifiable pride, and no establishment in the world can present a more splendid record. A thorough knowledge of, and close attention to the business. They use only of the very best quality of material, and the employment of the most skillful workmen have contributed to the results attained. The Planer Saw tooth is now one of the principal specialties invented by Mr. Emerson, and exclusively owned by this firm. It was first introduced about 8 years ago, and is having a very extensive sale, it is designed to obviate the necessity of filing, and so cheaply are they made and supplied, that it is far cheaper to use the planer bit, than to file the saws; they are sold at three cents each. The many very highly complimentary letters received by the firm from their delighted customers in all parts of the country and world, fully attest the great superiority of the planer tooth and other styles of saws here made, space will not permit of mention of the very numerous ingenious inventions of great utility, relating to the saw business, that have been made by Mr. Emerson, and that are manufactured at these works, his inventive genius seems to have covered the whole range of sawing and sawmill appliances and devised the many improvements that have made his name so well known throughout the whole world. A neat catalogue is published, giving full information in regard to all their products. This notice would be incomplete without some personal mention of Mr. Emerson, whose inventions have completely revolutionized the saw business and his associates in this great establishment. Mr. Emerson is a native of Maine, born in 1823. He went from there in 1852 to the Pacific Coast, and engaged in the lumber business, where the suggestions for great inventions that he has since made were received. He invented the insert saw tooth. He quit the lumber business and engaged in the manufacture and insertion of saw teeth, conducting a shop in San Francisco and one in Sacramento. He eventually sold out his business there, and removed to the state of N. J., where he organized and built up the American Saw Co., and conducted its operations a number of years; severing his connection with this Co., he made an extensive tour through the foreign manufacturing cities, inspecting the various processes of manufacturing, and gaining much valuable information and largely increasing his knowledge, already very extensive of the saw business. He was accorded many privileges and treated with much consideration by the foreign manufacturers. Returning to this country in 1869, he came to Beaver Falls and established the present industry, and is an enduring monument to the triumphs of American skill and genius, of what Mr. Emerson has every cause to be proud. The other members of the firm are Messrs. Jos. B. Smith and Julius F. Kurtz. Mr. Smith was formerly a large contractor and builder, and several of the prominent buildings of Pittsburgh were erected by him, including the fine Union Depot that was destroyed by the great July riots. He does not take an active interest in the business management, having retired from active business pursuits. Mr. Julius F. Kurtz, the junior member of the firm, has charge of the financial affairs and general office business, a position for which he is eminently qualified by years of practical experience, having been cashier of the Pa. company for a number of years. He brought with him into this enterprise a large personal acquaintance with the business interests of the country with ability of a high order. The firm of Emerson, Smith & Co., in their particular line of products, stands unrivalled by any contemporaneous establishment in the world, and no word of commendation can more than express the full award of merit that is justly their due, and their products are rapidly supplanting all other makes in every part of the world, being far in advance in all the desirable requisites in first class articles of all other makes. Mention should be made of the fact that American Steel is exclusively used in these works, having proven in every respect equal to the best English Steel ever made, and in some respects superior.

A. F. WOLF,—*Manufacturer of Stoves and Hollow Ware, Beaver Falls, Pa.*

Among the number of fine manufacturing establishments in Beaver Falls, there are none more complete or perfectly arranged in their way than the splendid new Stove Works of Mr. A. F. Wolf, which are worthy of more than passing notice, in a work reviewing the industries of this section. These works were originally founded by A. F. Wolf & Co., afterwards carried on by Messrs. Hildenbrand & Wolf in 1868, on a much smaller scale than at present exists. In 1870 Mr. Hildenbrand withdrew from the firm and the business has since been conducted by Mr. Wolf himself. It has gradually grown and increased under the enterprising management of Mr. W., and enlarged facilities were added from time to time to keep pace with the demand for his products. A fine establishment had thus been built up, when, in the early part of the present year (1879) the entire establishment with all the valuable patterns, was burned to the ground, and the labor and toil of years suddenly destroyed. With characteristic energy, Mr. W. immediately set about repairing his loss, and in a brief time his present fine works were erected. They are in many respects model ones, and are as completely and conveniently arranged as could possibly be desired, and every facility is afforded for the perfect and convenient manufacture of the different classes of products here made. The building is 225 feet square, and the different departments arranged in the most systematic manner. The works are supplied with all the latest and most approved machinery requisite in this branch of industry. A new and complete set of patterns have taken the place of those destroyed, and the works in every respect are superior to the old ones. The cupola has a capacity of 7 tons. From \$12,000 to \$15,000 is invested in the plant, while a large stock of Stoves and Hollow Ware is carried, as well as large quantities of raw material. 45 to 50 hands are employed, to whom \$2,200 per month is paid for wages. These works, in point of equipment and character of products, will compare most favorably with any in the United States. The trade extends throughout the West and many parts of the East. Shipments have been made to Japan, from whence a profitable trade may yet be derived. A spirit of progress and improvement pervades the whole establishment, improvements being continually made to their already very excellent products. Among some of the improvements that have been devised, the front top feed on all the cook stoves made, is one that has proven of great utility and convenience, and though first invented and adopted by Mr. Wolf on his stoves, has been adopted by many of the stove makers throughout the country, Mr. Wolf having neglected to protect himself by taking out patents. The invention is a very perfect and convenient one, affording an opening for supplying fuel without permitting the smoke and dust to escape from the stove, or without removing pots or kettles from it. This, with other improvements, has given to the products of this foundry an extended reputation, and has placed the "Howard Coal Cook Stove" and the "Woman's Rights Wood Stove," in the front rank of the most popular stoves in the country. The practical working of the foundry is under the charge of Mr. R. A. Thompson, the superintendent, who is a thoroughly experienced stove maker, and a gentleman of intelligence and ability. Mr. Wolf is a native of Lancaster Co., this State, he has been engaged in the present business since 1868, prior to that time he had been engaged in mercantile pursuits in Indiana and Ohio. He is an enterprising public spirited gentleman, taking an active interest in the affairs of the community, with the interests of which he is closely identified. With the most perfect facilities, large experience and abundant means, Mr. Wolf is enabled to present advantages to the trade not easily duplicated in this or any other market.

A. DAVIDSON,—*Miner and Manufacturer of Coal and Coke, Beaver Falls, Pa.*

The hills adjoining the town of Beaver Falls contain an abundant store of Coal, the vein being 3 feet thick and the coal of an excellent quality. A number of pits are in operation along the hillside—the most prominent and extensive being those of Mr. A. Davidson, which are located on the line of the Pittsburgh, Ft. W. & C. Ry. on the western side of the town. Two main entries are driven into the hillside, from which the coal is brought forth and run down an incline to the foot of the hill, where Mr. Davidson has recently erected a large building, 72x16 feet, with back building 45x60 feet, most conveniently arranged for loading, etc., where the coal is screened and stored, and loaded into wagons or cars for delivery to customers. The capacity of these mines is from 75 to 100 tons per day, and from 10 to 30 miners are employed. The trade is mainly local, many of the manufacturing establishments being supplied from these works, besides a large number of private families. Coke is manufactured also, on a limited scale, the coal making a good coke for some purposes. Mr. Davidson is a native of this place, and has been engaged in the coal business here since 1868, since which time his business has grown into its present large proportions. Prior to engaging in the coal business he was engaged in the lumber business. He is a gentleman well known and esteemed in the community with whose interests he is identified. He is now prepared, with the increased facilities that have been added to his works, to meet any demand that may be made upon him.

CO-OPERATIVE FLINT GLASS CO., Limited.

Manufacturers of all kinds of Flint Glassware.

This new and extensive establishment, originated and successfully established by a number of practical Glass workers, who conceived the idea of uniting their savings and labor and establishing a factory of their own, where the products of their willing hands might be formed,—is deserving of particular mention in a detailed review of the great industries of this section. The factory, which was ready for work and started up on the 18th of May 1879—within 3 months after ground had been broken—was built by the members of the company, who all went to work with willing hands, and in this brief time had the satisfaction of having completed one of the most perfectly equipped and arranged glass factories in the U. S. The works are most conveniently located and rare judgment was displayed in the selection of the site. The raw material is brought direct to their doors by the P. & L. E. R. R., and the products of the factory are rolled directly into the cars. The men in all the different departments are thoroughly experienced and skilled workmen, and are nearly all stockholders in the company. The class of work turned out covers the whole range of flint glassware and embraces a great variety of table ware, bar goods, jelly tumblers, toilet articles, lamps, and every conceivable variety of plain and fancy ware. The quality of the glass that is now being made here, is beyond a doubt equal in every respect to any heretofore made in the U. S. The results of their first 6 months' operations have been most gratifying, they were greeted with a rapidly increasing number of orders from all parts of the country, taxing their works to their utmost capacity to meet the demand. Notwithstanding the jealousy with which many of the older glass manufacturers of this section, who would gladly confine the productions to themselves, look upon this new enterprise and their wise predictions of failure, the success of the enterprise is now fully assured, and the popular Co-Operative Flint Glass Co. are in a manly manner pushing their way to the favor of the trade in all parts of the country to the disadvantage of the older combinations. Mr. L. Stoehr, the chairman of the company, is also General Superintendent of the works. He is a thoroughly competent and experienced glass worker and an enterprising and popular gentleman, possessing every requisite for the position he holds. Mr. Jos. K. Brown, the Secretary and Treasurer, to whom the inception of the enterprise is mainly due, has been connected with the glass business for many years in the capacity of clerk in one of the leading Pittsburgh manufactories, where he gained a thorough insight into the details of the business management of the glass business, and formed an extensive acquaintance with the trade throughout the country. He is well fitted for the position he holds, and possesses many qualities that have secured for him the esteem of his associates, as well as all who know him. The members of the company throughout are all men of character and experience, who have enjoyed the confidence of the community in which they have lived, and bring into their new enterprise the hearty good-will of the entire public.

With abundant facilities, cheap transportation, possessing within itself skilled and practical workmen in every department, and a determination to merit the highest success, this company is fully competent to hold their own against any adverse circumstances that may arise, and to produce articles as low as any concern in the U. S. Prompt and reliable, all orders entrusted to their hands are executed in the most satisfactory manner.

PITTSBURGH HINGE CO., Limited.—Beaver Falls, Pa.

Manufacturers of QUADRATE BARB FENCE WIRE.

*J. H. McMahon,
Treas.*

The greatly diversified character as well as the magnitude of the great industrial establishments that have sprung into existence at the bidding of the genius of enterprise and progress in this great iron centre of America, is perhaps but faintly realized by even her own citizens, and the value and importance of a work of this nature, conveying some adequate idea of the magnitude, extent and variety of the great industries of this section, is apparent to all who give the subject thought, and the dissemination of such knowledge as herein contained, throughout all parts of the world, must be largely conducive to the interests of all in any way connected with the prosperity of the community at large, as well as the individual establishments themselves.

The Pittsburgh Hinge Co., Limited, pursuing a special branch of manufacture, of a class of articles adapted to the great agricultural interests of the country, on a scale of great magnitude, are deserving of more than ordinary consideration in these pages. The company was organized in 1875, and leased the works at Beaver Falls now occupied, which had previously been operated by the firm of Reiter & Armor, in the exclusive manufacture of Hinges. These works since coming into the hands of the present company have been greatly improved and enlarged, and facilities added for the manufacture of the many varieties of goods now made. The plant consists of one main 3-story frame building 70 by 140 feet, one 3-story stone building 50 by 120 feet, chain shop 120 by 180 feet. The whole establishment is fitted with machinery of the most perfect kind, much of which is novel and peculiar to this establishment, and is admirably adapted to the work that it so wonderfully performs. The machinery is driven by water power aggregating 120-horse power. The machinery (the patent belonging exclusively to this Co.) for making their celebrated Quadrate Barb Fence Wire, is the most perfect in the world and gives to this establishment a great advantage over any contemporaneous concern in the same line. The works are capable of producing two car loads of their various goods per day. Their trade extends to all parts of America, and their products are rapidly finding foreign markets, possessing undoubted superior qualities. From 250 to 300 hands are employed in the workshops and from \$6000 to \$8000 is disbursed in wages monthly, a considerable number of the force employed being boys. The trade reaches in the neighborhood of half a million dollars annually. The products of these works consist of all varieties of agricultural chains, such as Coil, Well, Trace, Halter, Log Chains, etc. Hame Clips, Crowbars, Harrow Teeth, Fire Shovels and Pokers, Strap and T Hinges, Screw and Strap Hinges, Single Trees, Double Trees, Neck Yokes, Wrought Iron Seat Hooks, Clevises, Wagon and Plow Nails pointed by hand, patent Picket and Tent Pins, Lap Rings, Repair Links, and a great variety of other agricultural hardware. No other establishment in the U. S. covers the same range of products as this. Wherever these products have been sold, they have met with the approval of all who have used them, and they rank among the best goods in the market.

THE QUADRATE BARB FENCE WIRE.—One of their leading specialties is an article that so perfectly supplies a want long felt, so fully meeting all the requirements of a durable, perfect and cheap fence that, though of comparatively recent introduction, the demand for it has grown so rapidly that the capacity of the works have been fully taxed to meet the demand. The advantages of the barb fence are so numerous, while being the cheapest fence made, that it is apparent to all that the demand for it will continue to increase more rapidly in the future than heretofore. The advantages possessed by the Quadrate Barb Wire over other styles are set forth in the following claim: Having four points standing at right angles. Each barb is firmly fastened to its place and warranted not to become loose or slide along the wire. The barbs remain equally firm on single and twisted wire. The wire is twisted by a process that does not injure it. The barbs are put around the twisted wire, preventing untwisting in case either wire breaks.

Car-loads of this wire are daily shipped to all parts of the West and South, California, Australia, South America, and other distant parts. Mr. J. H. McMahon, Treasurer, has charge of the business management of the establishment, to whom all communications should be addressed. He is a native of Pittsburgh and has been identified with the iron business since boyhood. The patrons of the establishment will find in him a gentleman of high character, at whose hands they will receive the fairest treatment.

The Pittsburgh Hinge Co. in their great products offer inducements to the trade that are not easily duplicated by any establishment in the United States.

PENN BRIDGE WORKS,—S. T. White, C. E., Beaver Falls, Pa.

These Works were originally founded in 1864 by T. B. White & Sons, at New Brighton, on a much smaller scale than at present prevails. In 1876 the firm was dissolved, and the business has since then been conducted by his son, Mr. T. S. White. On the first of April 1879 the works were removed to their present location in Beaver Falls, where a much more eligible situation was secured, affording greatly increased facilities for the rapidly enlarging business. New works were erected, which are 60 feet wide and 240 feet long, finely fitted with new and improved machinery and convenient and necessary appliances for the successful prosecution of work, and in many respects are very complete and well equipped. All the modern appliances and machinery required for the most perfect work are to be found in them. Abundant room for yards and necessary work is had in the ground adjoining the works. The P., Ft. W. & C. Ry. passes in close proximity with convenient sidings, and it is but a short distance to the line of the P. & L. E. R. R. The mechanical department of the work is under the direct supervision of Mr. T. B. White, whose long, practical experience and thorough knowledge of bridge architecture renders him peculiarly fitted for the business. 30 to 40 hands are employed in the works, to whom from \$1000 to \$1500 per month are paid. From 8000 to 12,000 tons of iron are consumed annually. The trade of the Penn Bridge Works extends to many distant parts of the U. S., bridges having been erected in Massachusetts, Iowa, Missouri, Mississippi and many other States, while a large amount of work is done in building county bridges throughout neighboring counties, contiguous to these works. Many of the fine iron bridges on the line of the P. & L. E. R. R. were erected by these works. A 700 foot iron bridge across the Beaver at this point is now in process of erection by them. The fine bridges on Lock and Water st., Meadville, Pa., which are prominent for their symmetry and beauty, were also erected by Mr. White. These works with their new and enlarged facilities are prepared to do work in any part of the country on as reasonable terms as any establishment, and can take contracts and execute work in the most prompt and satisfactory manner. Many improvements suggested by years of practical experience and study have been made, and are peculiar to these works; among other notable points, cast iron details in the construction of bridges having been done away with. The trade of these works, already large, is rapidly extending. Mr. T. S. White was born in New Brighton in 1852. He has thoroughly qualified himself by study for the business in which he is engaged. He is a graduate of Cornell University in the degree of Civil Engineer, and since that time has been connected with these works. The Penn Works in their branch of business offer superior inducements and are worthy of most favorable consideration at the hands of those requiring their class of work.

GARDNER HOUSE, CHICAGO.—Jewett Wilcox, Manager.

CORNER MICHIGAN AVENUE AND JACKSON ST.—Rates \$2.50 and \$3.00 per day.

The GARDNER, in all the appointments, luxuries and comforts of a first-class hotel, has no superior in the city. Mr. Jewett Wilcox (date of the Trenton) having assumed the management, calls the attention of his friends, patrons, and the traveling public generally to the fact that in point of desirable surroundings, the Gardner—being situated on one of the broadest and most fashionable avenues in the city, directly facing the lake, from which it is only separated by the park in front of the house—has many advantages in its attractive location not possessed by any other hotel in the city. 250 rooms newly and elegantly furnished; convenient to all places of amusement; only one block from street cars running to all parts of the city. This short distance is more than compensated for by the delightful breezes from the lake, making the Gardner unequalled as a Summer Hotel. SPECIAL CONTRACTS made to delegations, excursions, conventions and permanent guests.

LOWEST AND HIGHEST PRICES OF COMMODITIES FOR FIFTY-THREE YEARS— 1825-1877.

(Compiled from the Reports of the Secretary of the Treasury for 1863 and 1873, the Commercial and Financial Chronicle, Reports of the N. Y. Chamber of Commerce, and the N. Y. Shipping List and Price Current.)

The following table, carefully compiled from the sources indicated, takes the prices of the twelve months in each year, selecting the highest and lowest quotation for each article. It is to be understood, where no mention of quality is made, that the price quoted is for the cheapest grade of each commodity.

The prices are those of the New York market.

Year.	Beef, Mess.		Butter.		Cheese.		Coal, Anthracite.		Coffee, Rio.		Corn.		Cotton, Upland.		Flour, West.		Hams.	
	Bbl.		lb.		lb.		Ton.		lb.		Bush.		lb.		Bbl.		lb.	
	L.	H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.	L. H.
	\$		cts.		\$				cts.		cts.		cts.		\$		cts.	
1825...	8 00	12 00	8 22	5 10	8 00	11 00	16 19	42	75	13	27	3 25	4 25	7 11				
1826...	8 00	10 00	13 18	6 12	11 00	12 00	14 17	62	83	9	14	4 25	5 75	8 11				
1827...	8 50	9 75	12 22	6 10	10 50	12 50	14 15	54	75	8	12	4 37	6 50	10 12				
1828...	8 50	10 00	13 18	4 7	10 00	12 00	12 15	46	62	9	13	4 56	8 00	8 11				
1829...	8 00	10 50	12 16	4 8	10 00	12 00	12 13	48	64	8	11	5 00	8 87	9 10				
1830...	7 62	10 00	12 16	5 8	7 00	12 00	10 12	48	65	8	13	4 75	6 00	9 11				
1831...	7 00	9 25	12 18	5 8	6 00	9 00	10 13	54	75	7	11	5 00	7 25	9 11				
1832...	8 37	10 75	12 18	5 7	8 50	16 00	12 14	50	87	7	12	5 60	7 00	9 11				
1833...	8 50	11 00	14 20	6 9	5 50	10 00	11 14	65	86	9	17	5 50	6 50	8 10				
1834...	8 50	10 00	12 17	5 9	5 50	6 50	11 12	53	75	10	16	4 81	5 75	8 10				
1835...	8 75	13 50	13 22	6 9	5 50	9 00	11 13	70	1 12	15	20	5 37	7 87	8 12				
1836...	9 25	13 50	10 26	7 12	7 00	11 00	11 13	83	1 12	12	20	6 87	10 25	9 17				
1837...	11 00	15 00	12 24	7 12	8 50	11 00	9 12	1 00	1 15	7	17	7 00	11 62	9 15				
1838...	14 00	16 00	17 27	6 10	7 00	9 50	9 12	76	1 00	9	12	7 00	9 00	10 15				
1839...	12 50	16 00	12 25	8 12	6 50	9 00	9 12	75	98	11	16	5 75	9 12	10 14				
1840...	9 75	14 75	12 21	5 9	6 00	8 50	9 12	46	63	8	10	4 62	6 50	4 10				
1841...	7 00	10 25	8 15	3 7	6 50	9 00	9 11	47	81	9	11	4 68	7 50	4 9				
1842...	6 25	8 25	9 15	5 9	5 00	9 00	6 10	54	68	7	9	4 25	6 37	4 9				
1843...	6 00	8 37	6 11	4 6	4 50	6 00	6 9	48	60	5	8	4 43	5 62	3 9				
1844...	5 00	6 75	8 14	3 7	4 25	6 00	6 7	43	54	5	9	4 25	5 00	3 9				
1845...	5 50	9 75	9 17	6 8	4 50	6 00	5 8	45	55	4	9	4 31	7 00	5 10				
1846...	6 25	8 50	10 17	6 8	5 00	7 00	6 8	55	80	6	9	4 00	6 00	5 11				
1847...	8 25	13 75	13 22	6 8	5 00	7 00	6 8	64	1 10	7	12	5 50	8 25	6 13				
1848...	7 75	13 00	13 20	5 8	4 50	6 00	5 8	52	78	5	8	5 25	6 62	5 11				
1849...	8 75	11 00	10 18	5 7	5 00	6 00	5 10	57	70	6	11	4 93	6 12	6 11				
1850...	8 00	9 75	12 18	4 8	5 00	7 00	7 14	55	72	11	14	4 93	6 25	6 11				
1851...	7 50	9 75	10 18	4 8	4 25	7 00	7 11	53	68	8	14	4 06	5 12	7 11				
1852...	8 25	17 00	15 29	6 9	5 00	7 00	7 10	62	78	8	10	4 25	6 00	8 10				
1853...	7 00	11 25	13 24	8 10	5 00	7 00	8 12	64	82	10	11	4 87	7 50	8 10				
1854...	8 00	13 00	15 24	6 12	6 00	7 50	8 12	76	98	8	10	7 25	10 75	7 11				
1855...	8 25	14 00	17 28	6 12	5 50	7 50	8 12	93	1 15	7	11	7 50	10 18	8 11				
1856...	8 00	12 00	13 28	6 11	5 50	6 50	9 12	48	94	9	12	5 20	8 31	9 11				
1857...	9 50	15 00	16 28	5 14	6 00	7 00	10 12	71	98	13	15	4 25	6 70	6 10				
1858...	9 00	12 00	13 25	3 10	5 00	6 00	9 12	58	1 03	9	13	3 75	5 20	9 13				
1859...	5 00	9 75	14 27	2 11	5 25	5 50	10 13	76	1 05	11	12	4 00	6 50	9 12				
1860...	4 50	5 50	10 21	9 12	5 50	6 00	11 15	64	95	10	11	4 25	5 50	10 13				
1861...	5 00	6 25	8 22	2 10	4 20	6 00	11 17	48	74	11	28	3 90	5 65	7 11				
1862...	5 00	10 75	10 26	4 13	4 25	8 50	10 33	50	75	20	68	4 20	5 85	5 9				
1863...	5 00	9 00	14 30	8 16	7 00	11 00	26 33	68	1 23	54	88	5 10	8 00	5 8				
1864...	5 00	16 00	21 48	12 27	9 00	15 00	33 52	1 25	1 97	72	1 90	7 15	11 75	11 17				
1865...	9 00	14 00	20 38	10 26	8 50	13 50	21 22	70	97	33	1 22	5 00	8 80	11 23				
1866...	11 00	21 50	25 60	5 13	8 50	13 00	18 21	80	1 32	52	5 25	11 70	11 22					
1867...	12 00	28 00	15 48	7 20	6 50	8 50	17 19	1 00	1 40	15	36	6 25	11 30	10 16				
1868...	11 00	21 75	28 60	7 19	6 50	11 50	16 17	1 01	1 4	16	33	5 50	9 75	11 18				
1869...	5 00	16 50	16 55	11 23	6 50	10 50	11 13	75	1 16	25	35	4 95	6 40	17 24				
1870...	5 00	16 00	18 46	5 18	4 50	8 50	11 13	76	1 15	15	26	4 50	6 05	9 14				
1871...	8 00	18 00	12 42	5 16	5 00	13 00	12 17	65	90	15	25	4 60	7 00	6 13				
1872...	4 00	12 00	20 39	10 19	3 75	6 25	16 19	61	80	18	25	5 25	6 80	6 9				
1873...	8 00	12 00	18 50	8 16	5 00	6 50	19 23	50	77	13	21	4 62	7 25	5 10				
1874...	8 25	11 50	18 39	12 17	4 55	5 55	16 28	53	84	15	19	4 25	7 00	8 11				
1875...	8 00	10 00	17 28	9 16	4 40	5 55	17 21	49	76	13	17	4 00	6 50	9 11				
1876...	8 50	11 00	15 33	8 13	3 75	5 55	16 20	38	49	11	13	4 00	6 00	7 13				
1877...	9 50	11 25	13 24	8 16	3 25	3 75	15 21	41	58	11	13	4 75	8 00	10 14				

LOWEST AND HIGHEST PRICES OF COMMODITIES FOR FIFTY-THREE YEARS— 1825—1877.

(Compiled from the Reports of the Secretary of the Treasury for 1863 and 1873, the Commercial and Financial Chronicle, Reports of the N. Y. Chamber of Commerce, and the N. Y. Shipping List and Price Current.)

NOTE.—In the American Almanac and Treasury of Facts for 1878, pp. 278-9, appeared a table of prices compiled on the basis of the average price of each article in New York, the 1st of January of each year. Such a table, however useful, fails to give the data which are important in forming a judgment of the whole range of prices for each year. The following table, carefully compiled from the sources indicated, takes the prices of the twelve months in each year, selecting the highest and lowest quotation for each article. It is to be understood, where no mention of quality is made, that the price quoted is for the cheapest grade of each commodity.

Years.	Pork, Mess.			Rice.			Salt, Liverpool.			Sugar, Raw.			Tobacco, Ky. Leaf.			Wheat.			Whiskey.			Wool.		
	Bbl.			100 lbs.			Sack.			lb.			lb.			Bush.			Gal.			lb.		
	L.	H.		L.	H.		L.	H.		L.	H.		L.	H.		L.	H.		L.	H.		L.	H.	
	\$			\$			\$			cts.			cts.			\$			cts.			cts.		
1825.....	12	00	14 75	2	00	4 00	2	37	3 00	6	11	3	9	75	1 06	25	31	30	38			30	38	
1826.....	10	00	12 00	2	00	3 87	2	12	2 60	6	10	3	8	84	1 02	26	36	28	38			28	38	
1827.....	11	25	15 25	2	50	4 00	2	15	2 35	6	10	3	6	90	1 25	25	35	20	30			20	30	
1828.....	12	00	15 00	2	50	4 00	2	25	3 25	6	10	3	6	95	1 62	20	26	20	30			20	30	
1829.....	11	00	13 75	2	50	3 75	2	12	3 00	5	9	5	7	1 00	1 75	26	26	18	27			18	27	
1830.....	11	00	15 50	2	00	3 50	1	75	2 20	6	9	3	7	1 00	1 15	21	32	16	30			16	30	
1831.....	12	00	15 25	2	50	4 00	1	75	2 25	4	7	3	6	1 06	1 35	27	37	20	35			20	35	
1832.....	12	50	14 25	2	75	4 25	1	75	2 50	5	7	3	6	1 12	1 35	26	35	20	35			20	35	
1833.....	12	50	17 00	2	75	3 75	1	60	2 00	5	9	3	8	1 15	1 28	29	36	27	35			27	35	
1834.....	12	75	15 00	2	25	3 62	1	40	1 80	5	8	4	8	1 02	1 11	20	29	25	35			25	35	
1835.....	13	50	18 50	2	75	4 50	1	47	2 25	6	9	6	11	1 04	1 50	30	38	25	40			25	40	
1836.....	18	00	30 00	3	00	4 25	1	60	2 12	7	11	6	10	1 37	2 12	31	44	35	50			35	50	
1837.....	16	00	24 50	3	12	5 00	1	20	2 62	5	8	3	9	1 55	2 10	20	48	28	50			28	50	
1838.....	16	50	25 50	3	25	5 37	1	62	2 37	6	8	4	13	1 35	2 00	30	43	28	40			28	40	
1839.....	14	50	23 50	3	00	5 00	1	44	2 12	6	8	8	16	1 15	1 37	28	46	37	40			37	40	
1840.....	13	00	16 00	2	75	4 00	1	40	1 75	4	8	3	16	95	1 25	21	30	20	35			20	35	
1841.....	8	75	13 50	2	87	4 12	1	40	1 98	4	7	4	14	90	1 50	19	25	20	30			20	30	
1842.....	6	75	10 25	2	00	3 31	1	37	2 25	3	7	2	9	83	1 30	16	21	18	22			18	22	
1843.....	7	50	11 50	1	87	3 00	1	35	1 62	3	7	2	7	84	1 20	18	24	17	24			17	24	
1844.....	8	50	10 25	2	25	3 62	1	25	1 52	5	7	2	6	82	1 11	21	29	25	37			25	37	
1845.....	9	25	14 12	2	62	4 75	1	32	1 47	3	7	2	7	85	1 40	20	28	24	30			24	30	
1846.....	9	62	13 37	2	87	4 50	1	25	1 50	5	8	2	7	80	1 35	18	25	18	28			18	28	
1847.....	10	5	16 00	8	25	13 75	1	20	1 55	5	8	2	8	1 05	1 95	24	34	22	30			22	30	
1848.....	9	00	13 00	7	75	13 00	1	25	1 55	10	15	3	8	95	1 40	21	27	20	30			20	30	
1849.....	9	87	14 25	2	25	3 50	1	20	1 40	4	6	3	9	1 20	1 35	20	28	25	32			25	32	
1850.....	10	00	11 87	2	25	3 37	1	15	1 75	4	7	5	14	1 09	1 50	23	27	30	35			27	30	
1851.....	12	06	15 50	2	75	3 12	1	02	1 60	4	6	3	14	93	1 22	20	27	30	41			30	41	
1852.....	14	62	19 75	2	75	5 00	1	05	1 55	3	5	3	9	1 03	1 15	20	25	26	42			26	42	
1853.....	13	00	19 75	3	37	4 50	1	12	1 62	4	6	4	10	2 22	1 80	22	32	38	44			38	44	
1854.....	12	12	16 00	4	12	4 62	1	47	1 70	3	6	5	11	1 75	2 50	26	41	25	40			25	40	
1855.....	12	50	23 00	2	50	5 87	90	1 22	4	8	6	15	1	96	2 80	30	41	24	34			24	34	
1856.....	16	25	21 00	3	62	4 87	80	1 05	6	10	6	16	1	30	2 17	25	36	30	38			30	38	
1857.....	16	50	25 70	3	25	5 37	70	84	9	11	7	20	1	25	1 95	21	37	30	44			30	44	
1858.....	15	35	19 00	2	75	3 75	62	80	5	8	6	18	1	20	1 50	21	35	27	32			27	32	
1859.....	11	60	18 12	3	00	4 50	75	1 07	5	8	4	14	1	30	1 65	23	29	34	45			34	45	
1860.....	16	12	19 75	3	00	4 62	68	1 15	6	8	3	13	1	35	1 70	19	27	34	40			34	40	
1861.....	12	25	18 00	3	00	7 25	50	95	4	9	3	16	1	20	1 60	15	21	22	45			21	22	
1862.....	11	00	14 50	6	62	7 75	85	1 52	7	11	6	30	1	30	1 55	19	39	40	65			40	65	
1863.....	11	50	18 25	3	75	8 50	1 20	1 70	7	14	8	36	1	25	2 00	44	78	62	80			62	80	
1864.....	19	50	43 25	7	00	15 50	1 75	3 50	11	25	8	55	1	72	2 75	60	2 03	75	1 10			75	1 10	
1865.....	19	00	31 50	9	75	14 00	1 55	2 50	11	17	7	45	1	25	1 88	1 92	2 25	70	77			70	77	
1866.....	21	18	33 55	11	50	15 25	2 50	4 10	10	15	8	18	2	20	3 45	2 00	2 33	25	27			25	27	
1867.....	18	90	24 11	8	50	12 50	2 60	2 75	9	10	9	16	2	30	3 40	2 10	2 32	25	37			25	37	
1868.....	21	10	29 50	8	25	11 25	2 50	2 60	9	12	8	15	2	05	3 25	91	2 30	34	37			34	37	
1869.....	26	50	33 37	7	25	10 00	2 50	3 00	9	13	8	13	1	45	2 18	90	1 14	32	35			32	35	
1870.....	20	00	30 00	5	50	9 50	2 40	3 25	9	10	7	12	1	40	1 90	82	1 45	34	45			34	45	
1871.....	12	85	23 00	6	75	9 75	2 80	3 25	7	10	6	11	1	45	2 00	85	95	32	63			32	63	
1872.....	12	80	16 00	7	50	9 50	2 80	3 25	7	9	9	16	1	65	2 10	82	91	45	7			45	7	
1873.....	13	01	19 00	7	00	9 50	3 00	3 50	7	9	9	16	1	55	2 25	86	1 05	35	57			35	57	
1874.....	13	85	24 25	6	75	10 00	1 10	3 00	7	8	7	25	93	1 35	92	1 03	36	48				36	48	
1875.....	18	00	22 75	6	50	8 50	1 15	2 35	7	9	9	28	92	1 37	93	1 19	38	48				38	48	
1876.....	15	70	22 37	5	00	7 50	1 15	2 50	7	10	7	19	84	1 27	1 04	1 10	25	43				25	43	
1877.....	11	75	17 37	5	00	7 00	1 10	2 50	7	10	7	16	1 06	1 85	1 04	1 69	32	43				32	43	

NOTES ON THE GEOLOGY OF PITTSBURGH.

By B. C. JILLSON, M. D., Ph. D.

At a meeting of the Chamber of Commerce, held June 3, 1879, Dr. B. C. Jillson, by special invitation, read a paper entitled, "Notes on the Geology of Pittsburgh." After its reading a committee was appointed to request the paper for publication in the forthcoming work of Mr. Richard Edwards on "The Industries of Pittsburgh."

It is said to be a wise provision of Nature which causes great rivers to flow near large cities; so we find it also a wise provision of Nature which, in like manner—though not always so evident to the casual observer—shapes the physical features of the country in such a way as to give great advantages to one particular spot over another. Pittsburghers justly pride themselves on what they have done by their industry, energy and business habits. Industry and energy, under intelligent guidance, will overcome all difficulties. Our fathers perceived the advantages of this locality which Nature had prepared for us, and availed themselves of it, and their sons have wisely followed in their footsteps. But have we done all we can do? Have we improved *all* the advantages which Nature has poured on us with such a lavish hand? Let us look at some of the geological advantages of this locality.

Starting from the Atlantic seaboard and going west, we notice a wonderful difference in the physical features of the country in every few miles' travel. At first we find the rocks hard and coarse, and composed of various ingredients, bent and twisted so that they have no form or comeliness. Soon, however, these irregularities change, and we find the rocks arranged in regular layers, forming ridges or waves, which increase in size till the huge folds familiar to us as the Allegheny mountains are reached. From the Allegheny mountains westward the waves grow less and less through Johnstown, Latrobe, Irwins, hardly perceptible in Pittsburgh, and gradually disappearing in the boundless prairies farther west. Close examination shows that these rocks were folded by intense pressure and were accompanied by great heat, and that the mighty engine which accomplished this work was far east. The effect on the coal illustrates this. The coal beds of Rhode Island and Massachusetts, estimated at 500 square miles, are pressed out of all shape—the maximum bed, thirteen feet in thickness, dwindling away in many places to a mere thread jammed into the hard metamorphic rock. The coal, too, has been so changed by heat that it is seldom used for fuel. Its character is well illustrated by the story of two New Englanders who were once conversing on the destruction of the world by fire, when one of them remarked that if he were here at that time, and found the world was burning up, he would run and stand on the Rhode Island coal banks, for he was sure they would be the last things to burn. Further west, in the anthracite coal region, we find the seams bent into nearly every conceivable shape, dipping sometimes at one angle and sometimes at another—sometimes with the strike in one direction and sometimes at another, though in general from the north-east to the south-west. Farther west, at the Broad-Top field, the coal is neither anthracite nor bituminous, but partaking of the nature of both, and, therefore, called semi-bituminous, and here in Pittsburgh we find, for the first time, the coal pure bituminous, unaffected by pressure or heat, with all its chemical and physical characters well preserved. Our coal is located on the eastern border of an extensive coal field, which was unaffected by those agents which naturally changed the coal and made such havoc with the layers of rock further east. But there is another aspect of this coal field which deserves our consideration, if we would realize how much Pittsburgh is indebted to Nature's slow and continuous labor long ages ago. The rocks in this vicinity are nearly horizontal. Standing at the "Point," where the Allegheny and Monongahela unite to form the Ohio, we see, opposite, Coal Hill or Mt. Washington, rising abruptly, from the very brink of the river, more than 400 feet. This hill is composed of layers of rock arranged horizontally, with just enough difference in color and external appearance to be recognized at this distance. At the base we see about 100 feet of an olive or buff-colored shale, and directly above it a layer of sandstone 75 or 80 feet thick, of a gray color and somewhat micaceous. Resting on this sandstone are layers of shale and limestone, the whole forming a bed of about 125 feet in thickness. Three hundred feet above the river we see distinctly the layer of coal, like a broad, black belt, girdling the hill. Upon the layer of coal rests at least 100 feet of shales, sandstones and limestones. Upon and down the left bank of the Monongahela and Ohio, as far as the eye can reach, these belts of rock can be plainly seen, undeviatingly in the order and position described. Looking now across the Allegheny, to the rear of Allegheny City, we see exactly the same arrangement of rock—shale corresponding to shale, sandstone to sandstone, limestone to limestone, to the top of the hill, while beyond and at a greater height we find the coal. Looking up the Allegheny river, we see the layer of shale forming Troy Hill, while at a greater height, in the dim distance, we see the openings in the coal layer. At the Union Depot we find the 100 feet of shale capped by the sandstone layer in the quarry back of the High School building, while near the top of the hill the coal makes its appearance. These horizontal strata which we see on every side, answering layer to layer, are silent witnesses of the past. They show plainly that the general surface of the surrounding country was at one time about 400 feet above where we now stand. If the rocks which form our county had been the hard granitic and metamorphic rocks of the eastern part of our State, our valuable coal beds would have remained covered, and only accessible from the surface through more than 100 feet of solid rock, with all the attendant labor and expense; while all the advantages which Pittsburgh now possesses in the easy accessibility to its coal would have been wholly lost. But the rain, the snow, the frost, have worn away and disintegrated our soft rocks, so that the whole surface of our county is agreeably diversified with hill and dale, not only adding to the beauty of the scenery, but, what is of more practical value, permitting us everywhere to enter our coal seam at the surface. Of this coal seam, the eminent geologist and celebrated traveler, Sir Charles Lyell, says: "I was truly astonished, now that I had entered the hydrographical basin of the Ohio, at beholding the richness of the seams of coal, which appeared everywhere on the flanks of the hills, and at the bottoms of the valleys, and which are accessible in a degree I never witnessed elsewhere." Had the mighty power which folded the eastern rocks into huge waves extended its influence to this part of the State, our coal banks, instead of being horizontal, would have been upheaved at various angles, and the many faults would have added materially to the expense of mining. Each of our large rivers, the Allegheny, the Monongahela, the Youghiogheny, and the Ohio rivers, as well as

Chartier's creek, Pine creek, Gerty's run, and, in fact, all our streams, both great and small, once flowed more than 200 feet above their present level. I have traced and mapped these ancient rivers through their various windings for 75 miles, from beyond Perryopolis, in Fayette county, through "White-Oak Level," back of McKeesport, through Swissvale, Wilkinsburg and East Liberty. From this point one branch passed through Bloomfield, Friendship Grove, the upper part of Allegheny cemetery, and along the top of Troy hill to Hilldale cemetery. The other branch passed through Shady Side, Bellefield, Oakland, and along the top of Boyd's hill and Seminary hill, Allegheny, uniting with the first branch at Hilldale cemetery. From this point the united branches passed around the hills back of Manchester, making its first appearance on the present Ohio near the mouth of Wood's run. From this point it followed the general direction of the present Ohio, leaving its mark on each side of the river, in some places nearly 300 feet above the present water level. Since that time these rivers have somewhat changed their course, though not their general direction, digging the deep ditch for their present bed, in which ditch Pittsburgh has since been built. Were it not for this benevolent action on the part of Nature ages before we were born, our coal would now be elevated from the mines by machinery, with its attendant trouble and expense, instead of being mined as now, above the river, and shot into barges by its own weight. As these rivers wore away the rocks, they several times changed their course in limited localities. The Allegheny river at one time passed to the right of Seminary hill, its gravelly bottom forming the plain on which Allegheny City now stands. At a later date, it forced its way to the left of Seminary hill, making the channel in which it has since remained. The head of the Ohio was at one time at Hilldale cemetery, at another near Manchester, and at a still later date at Suke's run, at the base of Boyd's hill, a mile above its present position. Every where these ancient rivers wrote the history of their movements.

Let us briefly note a few of the hieroglyphics they have left, more easily translated than the hieroglyphics on the Egyptian monuments, which so long baffled the skill of our best scholars. The deposit of sand in Perryopolis utilized by the glass house there, and the immense number of boulders scattered over the immediate vicinity; Finley's Sand-wash in East Liberty, and the beds of sandstone, gravel and clay, and boulders deposited in that valley; the sand in the upper part of Allegheny Cemetery; the beds of clay which have proved a source of profit to the owners of Boyd's Hill; the top of Troy Hill, as level as a floor for two or three miles; the deposit of gravel in which the basin for the Allegheny water works is placed; the immense beds of gravel near Hilldale Cemetery; the four feet of gravel on the top of McKee's Rocks; the Terraces on the right bank of the Ohio on which Bellevue and other places are situated; the immense quantity of boulders at Beaver and Rochester, which for scores of years have been drawn upon to pave the streets of our city; the beautiful terraces which marked its flood tides and former level, notably those in McKeesport, in East Liberty Valley, the second bank in Allegheny and the four banks so plainly shown in the early settlement of our city, the largest and highest being the one on which Trinity Church and its surrounding grave-yard now stands.

Until the oil discovery a few years ago the Allegheny river was noted for its pure, clear water, while the Monongahela was equally well known as a muddy stream. Where they united at "the Point" the action of each river could be easily traced by the color of its waters. The Monongahela coming from the south and passing over the soft shales and clays and limestones of the carboniferous period, became muddy from this source, while the Allegheny flowing through a region of hard conglomerates and sandstones remained clear. There is another marked difference in the character of these two rivers. The valley traversed by the Allegheny is narrower and the force of the stream much greater. From Oil City to Pittsburgh, a distance of 132 miles, the fall is 277 feet, averaging 2.1 feet per mile, while the more sluggish current of the Monongahela may be illustrated by the fact that the difference in the water level between Brownsville and Pittsburgh, a distance of 60 miles, is only 32 feet, averaging about six inches to the mile. The Monongahela, therefore, brings down only fine sediment, while the force of the Allegheny is sufficient to move sand, gravel and fragments of rock of considerable size. It also happens that the Allegheny and Monongahela rivers strike the point at different angles and that the space between them upon which Pittsburgh stands was formed wholly from material brought by the Allegheny from the more northern part of the State. The larger part of both Pittsburgh and Allegheny are built on plains made up of porous layers of angular and rounded sand and gravel, and not upon a solid, impervious stratum of clay, such as the Monongahela would have produced. This seemingly slight difference in the direction of these two rivers and the difference in the character of their sediment has formed in no slight manner the hygienic condition of our city. The early settlers built upon the plain 40 feet above low water mark. The porous nature of the soil and the surface drainage was then sufficient; but the present size of our city demands careful and systematic sewage if we would escape those zymotic diseases which result from the neglect of the most simple hygienic laws. With respect to drainage, few cities are more favored by nature than ours. The hillside wards require no blasting for sewer-pipes, the rock being easily removed with the pick, while the wards of the old city can be easily excavated with the spade. The reservoirs of our water works are of ample size, capable of supplying our people with an abundance of water for many years to come, while one of them is located more than 500 feet above the river. With such natural and artificial advantages why should not Pittsburgh be the cleanest city in the United States, and forever prevent a repetition of the South Side diphtheria epidemic of 1877 and the Reform School typhoid fever epidemic of 1875, both of which were greatly aggravated, if not directly caused, by improperly constructed and grossly neglected sewer pipes? Another peculiar feature of the two rivers which bound our city, is the unsymmetrical character of their rise and fall. Being large rivers and draining a considerable extent of country, they are like all large rivers subject to times of great and sudden overflow. The Allegheny rises in Southern New York, nearly 43° N, and the Monongahela in West Virginia, about 39° N. These sources, then, being some 4° apart, are, of course, subject to local influences of a very different character, and the tide or rise of these rivers are quite different. One river may be quite low and the other at flood-tide, and a little time after the reverse may be the case. The material brought down the river and the decomposing vegetable matter on its banks and on the low ground near the shores, produced much malarial sickness, but the settlement of the neighborhood, with the natural and necessary improvements on the shores, has nearly eradicated the disease. Of course, the sudden and great rise and fall of the rivers still continues, and is carefully watched by those whose business necessities require it. A meteorological phenomenon connected in

some way with these rivers or with the deep gorges through which they pass, is worthy of careful consideration. Sometimes a rain storm will come up the Ohio and either pass up the Allegheny Valley or up the Monongahela Valley, or, dividing, will not unfrequently pass up both. Sometimes a storm will pass across from one river to the other, confined to a very limited area. A few Sundays ago it rained hard on Herron's Hill, while in the lower ward of the city and at Shady Side no rain fell. A few days after it rained hard in the lower part of the city, with none at Millvale Station on the P. R. R. I think I never saw it rain harder than it did at the Union Depot some two years ago, but not a drop fell at Lawrenceville R. R. station. Many other similar illustrations could be given. You all remember the terrible calamity which befel our city in July, 1874, when two hundred persons lost their lives at Butcher's Run. A few careful observers, with the proper instruments, taking systematic and synchronous observations over the area described, would, in a few years, I doubt not, be able to explain the laws which govern these singular movements.

Our rocks, as you well know, belong to the carboniferous system. The rocks forming this system are conglomerates, shales and sandstones, more rarely limestones. They occur in various alternations with an occasional bed of coal between them. All the coal beds taken together make not more than one-fiftieth of the whole thickness. Just here in Pittsburgh we have but one layer of coal in situ, though to the north we have coal beds which are geologically lower than our own, and to the south we have coal beds that are geologically higher than our own; the rocks here in Pittsburgh, not being exactly horizontal, but dipping slightly to the south, so that the rocks concealed from view below the bed of the river outcrop farther north, and the rocks which top our highest hills, extend over the whole country to the south of us. On the left or west bank of the Monongahela, opposite Pittsburgh, a steep bluff rises from the bank of the river 450 feet. The highest rocks are not well exposed, but the occasional outcrops show that they constitute a part of the great limestone formation which shows itself in all the counties south of Pittsburgh, between the Chestnut Ridge and Ohio River. "It may be traced up the Monongahela River from Pittsburgh to the Virginia line." It varies in thickness from a few feet to fifty or seventy-five and is often mixed with thick layers of sandstone and shales. It makes a most excellent lime and is extensively burned in the eastern and southern part of our country. While there are several other layers of limestone in this vicinity geologically lower than the one under consideration, they are quite thin and make but poor lime, and are but little used.

H. D. Rodgers says, "It is the most extensive and valuable deposit in the valley of the Monongahela, or anywhere else in the western counties of the State." Between the limestone layer just described and the Pittsburgh coal are layers of a yellow ferruginous shale interspersed with a gray, slaty, and in many places very micaceous sandstone, about 75 or 80 feet thick. The Pittsburgh coal seam comes next in order. The peculiar features of the Pittsburgh coal are well known to you. The late Henry D. Rodgers calls it "coal of the purest kind," and J. P. Lesley says, "It is pure bituminous coal, yielding 40 to 45 cubic feet of gas to ten pounds of coal where best known and very free from sulphur." But there are some other characteristics of this bed which makes it of peculiar value to the geologist. Its dual character and its great extent of surface make it a landmark—the base line of carboniferous geology. This remarkable bed has been identified over an area of 20,000 square miles and is everywhere the same double bed. It is found in Virginia, Ohio, Kentucky and in other parts of our own State, and everywhere the impure slate above retains its proportionate relation to the whole mass. For example, in our eight-foot vein we have five or six feet of solid coal below, with about two feet of impure coal above. In the Cumberland basin where the vein is twelve or fourteen feet in thickness, we have nine or ten feet of coal below and three or four feet of the shaly structure above. At Wheeling, Virginia, with its six-foot vein, at Athens, Ohio, with its five-foot vein, at Guyandotte, West Virginia, with its two or three-foot vein, this peculiarity is preserved. Is it not strange that over a country as great as 20,000 square miles the circumstances should have been so similar as first to permit and foster the growth of vegetable matter for a long time, and then to cover it so universally, over this whole area, with sand and clay and an imperfect vegetation? The amount of vegetable matter necessary to form one foot of coal has been estimated to be about eight feet, or over 60 feet for such a bed as that of Pittsburgh.

Below the coal there are some eight or ten layers of limestone from one to two feet thick, and separated from each other by layers of dark-colored shale—the whole forming a bed of about twenty-five feet in thickness. The shale or sandstone upon which this bed rests is about thirty-five feet thick, and in some places is composed almost wholly of shale, while in other localities the shale passes into very thin layers, and the sandstone expands into blocks sufficiently thick for building purposes. Below this we find a bed of limestone four feet thick, separated from another two-foot vein by 12 feet of yellowish shale. Below this last layer of limestone are 35 feet of buff shale, and then another layer of limestone three feet in thickness—hard, compact, and of a yellowish color. This rests on a stratum of shale marked with iron, sometimes passing into a coarse, slaty sandstone—the whole 10 or 12 feet thick. Then follows a red or mottled shale, 12 feet in thickness, sometimes wanting, but generally exposed around Pittsburgh. All the layers just described which lie below the coal have as yet been of no great value to Pittsburgh. The iron is a mere trace, the shale of no practical value, and the limestone is so thin as to be of little importance as a source of lime for masonry or agriculture. The next layer is one of considerable value, being a sandstone 75 or 80 feet in thickness, and extensively used for building purposes. It varies in color, quality and appearance, being generally of a gray color, sometimes very micaceous, with the wave and ripple marks well shown. It also varies much in durability, sometimes remaining unchanged for years, but often weathering badly and crumbling on exposure. Great care should therefore be used in its selection. The court house shows the weathering action in a marked degree. Stone from other quarries, but belonging to the same geological layer, are in general much more durable and serve a good purpose. Most of the stone, however, now used for heavy masonry in our city, comes by rail from some distance, notably from Freeport and other places up the Allegheny—from Baden and Beaver, down the Ohio—and from Ligonier, Westmoreland county, on the Pennsylvania Central Railroad. The stone from the Allegheny and Ohio belong to the Freeport, Butler and Mahoning groups—are geologically lower than our Pittsburgh rocks—are concealed from view below the bed of our rivers, but crop out farther north. The Ligonier sandstone is probably the same layer as our Pittsburgh sandstone just described, but much more durable. At the base of the hills which surround our city we find 100 feet of olive or buff-colored shale, which seems universal throughout the county. The lower part of this

bed is easily decomposed, weathering into a stiff clay, while the upper part is of a harder structure, often containing thick layers of sandstone, with, in some localities, fine impression of plants. This rock is sometimes divided very regularly by numerous straight, vertical planes of fracture, parallel to one another, separating it into large, angular blocks, giving to the rocks where it occurs a front like a fortification. On a level with the river, but generally concealed by detritus, is a layer of black slate, two feet in thickness, resting on a bed of coal about one foot thick. These layers have been noticed in Wilkins, Versailles, Indiana, Ross and Shaler townships, in each case having about the same thickness, and in many cases the appearance and properties of cannel coal. Where it outcrops along Butcher's run, on each side of the Perrysville road, it is a good bituminous coal.

The rocks concealed from view below the bed of the river are not so well known; and, although there are many borings in this immediate vicinity, little or no attempt is made to keep a correct account of the layers passed through. When this is done, it is generally a difficult matter for any but an experienced person to distinguish between coal and black slate, and the nature of the rock bored, except in hardness, color, and the like general characteristics. As all our rocks dip slightly to the south, the general character of the rocks below our city can be determined by their outcrop farther north. * * * * *

Before closing, permit me to call your attention to a discovery of much interest connected with the pre-Adamic history of our city. At a public lecture given in the High-School building, winter before last, I had the pleasure of showing a fossil tooth of the *Elephas primigenus*, or Mammoth, and also of one of another species of elephant familiarly known as the Mastodon. The Mammoth's tooth was exhumed from the gravel while excavating for the piers of the Point bridge. It was in good condition, and is now in the possession of a gentleman living on the South Side. The Mastodon's tooth was found in the Ohio near Sewickley. On exposure, it soon fell to pieces, but with care and skill it was restored. I have just learned that Prof. Ward, of Rochester, N. Y., will, this year, place in the Exposition building his restoration of the large Mammoth found well preserved in the ice cliffs in Siberia. This restoration will give some idea of the first settlers of Pittsburgh, who once roamed over our hills and inhabited our valleys.

PITTSBURGH COAL AND COKE REGION.

The business that is done here in the course of the year is most difficult to ascertain, as the railway companies do not separate their tonnage into that carried *through*, and that for local use. It is safe to estimate the sum total from the immediate vicinity at 5,200,000 tons. This is mainly forwarded to points North, South, East and West, by rail and water. The shipments of coal and coke by the river to points below the city last year amounted to over 2,627,750 tons.

The coal shipped down the Ohio river from the neighborhood of Pittsburgh is obtained from receipts through the medium of the Monongahela slack-water navigation system, and the coal carried by the Saw-mill Run Railway. The totals are as below:—

Coal and slack from Pool No. 1.....	12,237,465 bushels.
Coal and slack from Pool No. 2.....	34,263,450 bushels.
Coal and slack from Pool No. 3.....	11,336,100 bushels.
Coal and slack from Pool No. 4.....	12,101,240 bushels.
Total Coke	6,887,000 bushels.
Grand totals, Coke, Coal and Slack ..	76,825,255 bushels.
Saw-mill Run Railroad Coal Tonnage total in 1878.....	2,321,991 bush., or 88,235 net tons.

The above gives the tonnage that starts out from the several mines along the routes named and is what is known as 'river' coal. A portion is left for local consumption in Pittsburgh, Allegheny, etc., and the following is a summary of the entire movement of coal and coke:

Coal by slack-water.....	69,938,255 bushels.
Coke by slack-water.....	6,887,000 bushels.
Coal by Saw-mill Run Railroad.....	2,321,991 bushels.
Total movement.....	79,147,246 bushels.
Shipments down the Ohio.....	65,697,000 bushels.
Leaving for local consumption.....	13,450,246 bushels.

There is a large amount of coal for local use received by rail and it may be estimated at twice as much as the above quantity. Estimate 25 bushels to the net ton.

The first Bituminous coal district of Pennsylvania embraces the counties of Washington, Westmoreland, Fayette, Green, Somerset, Bedford and nearly all of Allegheny. There were two hundred and forty-four mines, employing more than ten men, of which two hundred and seventeen were in operation during the year 1878:

Number of men employed inside the mines, estimated.....	15,190
Number employed outside, estimated.....	2,821
Estimated amount of coal produced in the whole district in tons of 2,000 lbs.....	9,372,881
Estimated average price paid (exclusive of nut coal) for mining per ton of 2,000 lbs	42 cents.
Estimated number of tons mined per miner.....	560
Number of accidents in 1878.....	93
Number of fatal accidents.....	32
Number of non-fatal accidents.....	61
Estimated amount of coal produced for each fatal accident, in tons.....	292,902
Amount for each non-fatal accident.....	153,653
Amount for each accident.....	100,801

The coke industry in this district is a most important one. There are 3,902 ovens, with a daily capacity of 241,924 bushels. They are all located at Westmoreland and Fayette counties, and ran two-thirds time upon the average.

In coking the coal, the beehive oven is in universal use in the Connellsville region. These ovens vary, at the different works, from 11 to 12 feet in diameter and from 5 to 6 feet in height. The working is very simple. The coal is dumped through an opening in the crown of the furnace and spread evenly on the floor to the average depth of 2 feet for 48-hour coke and 2½ feet for 72-hour. The front opening through which the coke is discharged, is at first nearly closed with brick, luted with loam. The heat of the oven from the previous coking fires the charge, and as the coking progresses the air is more and more shut off by luting the openings, and finally closing the roof openings. The average charge is 100 bushels of coal at 76 lbs., and the yield in coke 120 bushels at 40 lbs., making the percentage yield 63, or 1.6 tons of coal to 1 ton of coke. The average time of coking is 48 hours, with 72 hours for that burned over Sunday. 24-hour coke is sometimes made. The 72-hour coke is firmer coke than either of the others, but it is questionable whether it is a better furnace coke. When the coke is thoroughly burned the door is removed and the coke is cooled by water thrown in from a hose, and then drawn.

The statistics of this trade are surprising. The manufacture began in the winter of 1841-2. According to the latest information we have, there are 3,668 ovens in the Connellsville region, and nearly all are in operation. Annual output at present is about 1,500,000 tons.

MONONGAHELA COAL REGION.

By means of its slack-water navigation, the Monongahela river is made navigable at all seasons of the year, and boats carrying eight hundred tons are passed down. The city of Pittsburgh is supplied mainly by railroad, and the larger portion of the coal by river is run down the Ohio and Mississippi to the lower markets. The following statement of shipments by the slack-water navigation from 1845 to date, is of interest:

YEAR.	*TONS.	YEAR.	*TONS.	YEAR.	*TONS.
1845.....	184,200	1857.....	1,158,939	1869.....	2,100,504
1846.....	311,156	1858.....	1,027,866	1870.....	2,303,856
1847.....	385,805	1859.....	1,131,467	1871.....	1,944,852
1848.....	392,774	1860.....	1,517,909	1872.....	2,291,220
1849.....	398,340	1861.....	834,630	1873.....	2,094,312
1850.....	491,918	1862.....	743,358	1874.....	2,503,504
1851.....	490,850	1863.....	1,134,150	1875.....	2,275,265
1852.....	585,233	1864.....	1,402,828	1876.....	2,495,800
1853.....	628,654	1865.....	1,580,791	1877.....	2,677,460
1854.....	693,278	1866.....	1,704,212	1878.....	2,797,530
1855.....	889,360	1867.....	1,202,908	*We have estimated 25 bushels of 80 lbs. to the ton of 2,000 lbs.	
1856.....	353,364	1868.....	1,812,040		

The business done by the various railroads entering or passing through this coal field, is indicated by the fact that in 1878 the Pennsylvania Railroad carried upwards of 1,429,428 tons from this district. In this connection, the cost of transporting coals over waterways, as from Pittsburgh to New Orleans, is of value. The distance is something like 2,000 miles, the rate is about 3½ cents per bushel, or \$1.05 per ton of 2,240 lbs.; the ordinary time being about two weeks when all circumstances are favorable. From Pittsburgh to Louisville, Ky., the distance is six hundred miles: the cost 1½ cents per bushel, including return of empty craft; and the time five days. Coke forms a considerable item in the business from this region. Some 129,000 tons were shipped last year. It weighs 40 lbs. to the bushel, and 62½ lbs. of coke represents 100 lbs. of coal, so that of the total product of this region in 1878, 1,548,428 tons was sent out by rail.

SHIPMENTS OF COAL AND COKE BY THE MONONGAHELA NAVIGATION COMPANY.

In connection with the table just given we add below the statistics of total shipments of coal and coke by the Monongahela Navigation Company from 1844, when the first shipments were made, to 1878, for which we are indebted to the personal courtesy of Hon. J. K. Moorhead, the president of the company. The shipments are given in bushels, each thousand bushels being regarded as the equivalent of 38 gross tons, which makes the weight of a bushel 85.12 pounds.

Years.	Bushels.	Years.	Bushels.	Years.	Bushels.	Years.	Bushels.
1844	737,150	1853	15,716,367	1862	18,583,956	1871	48,621,300
1845	4,605,185	1854	17,331,946	1863	26,444,252	1872	57,80,500
1846	7,778,911	1855	22,231,009	1864	35,070,917	1873	58,276,995
1847	9,645,127	1856	8,584,095	1865	39,522,792	1874	65,881,700
1848	9,819,361	1857	28,973,596	1866	42,605,300	1875	63,707,500
1849	9,708,507	1858	25,696,669	1867	30,072,700	1876	68,481,000
1850	12,297,967	1859	28,286,671	1868	45,301,000	1877	79,480,918
1851	12,521,228	1860	37,947,732	1869	52,512,600	1878	76,825,255
1852	14,630,841	1861	20,865,722	1870	57,596,400		
						Total,	1,153,646,169

COAL TRADE OF THE UNION.

We give below the tonnage for the year 1869, as per census reports made in 1870, together with figures for the year 1878, where available; in other cases we have made a careful estimate, based upon our reports of the trade in the various States:

	1869—tons.	1878—tons.		1869—tons.	1878—tons.
Penn'a Anthracite.....	13,866,180	17,605,262	Kansas.....	32,938	300,000
Penn'a Bituminous.....	7,798,517	13,500,000	Oregon.....	.....	200,000
Illinois.....	2,629,563	3,500,000	Michigan.....	21,150	30,000
Ohio.....	2,527,285	5,000,000	California.....	.....	600,000
Maryland.....	1,819,824	1,679,322	Rhode Island.....	14,000	14,000
Missouri.....	621,930	900,000	Alabama.....	11,000	200,000
West Virginia.....	608,878	1,000,000	Nebraska.....	1,425	75,000
Indiana.....	437,870	1,000,000	Wyoming.....	50,000	100,000
Iowa.....	263,487	1,500,000	Washington.....	17,844	150,000
Kentucky.....	150,582	900,000	Utah.....	5,800	60,000
Tennessee.....	133,418	375,000	Colorado.....	4,500	367,000
Virginia.....	61,803	75,000			
			Total,	31,114,595	49,130,584

COAL TRAFFIC OF THE PENNSYLVANIA RAILROAD.

DISTRICT.	YEAR 1878.	YEAR 1877.	YEAR 1876.
Anthracite.....	697,704	694,180	687,172
East Broad Top.....	63,068	54,738	65,999
Huntingdon and Broad Top.....	76,826	87,905	44,461
Cumberland.....	167,108	139,394	147,512
Snow Shoe.....	29,168	42,985	50,916
Tyrone and Clearfield.....	1,270,612	1,340,744	1,190,488
Gallitzin and Mountain region.....	200,099	184,464	209,315
West Pennsylvania Railroad.....	186,308	187,345	178,324
Coke.....	80,994	58,483	57,797
Southwest Pennsylvania Railroad.....	25,663	39,010	157,150
Coke.....	786,805	635,990	539,640
Westmoreland region.....	692,586	786,039	896,590
Coke.....	78,766	64,905	59,462
Pittsburgh region.....	1,429,438	1,374,396	1,310,846
Coke.....	128,918	107,840	162,126
D. H. & W. Anthracite.....	72,440	94,685	95,434
Lewisburg Anthracite.....	1,758	10,789	8,863
Total in tons of 2,000 lbs.—coal.....	3,920,766	4,086,674	4,018,159
Total in tons of 2,000 lbs.—coke.....	1,085,990	867,218	819,125

IRON AND STEEL PRODUCTION OF PITTSBURGH AND ALLEGHENY COUNTY, PENNSYLVANIA, FROM 1874 TO 1878.

So much interest is taken in the progress of the iron and steel industries of Pittsburgh and vicinity, that we have annually for several years given the statistics of their production exceptional prominence. In the following table these statistics for the past five years are presented:

YEARS.	Number of Iron Rolling Mills.	Product of Iron Rails, Bar, Angle, Bolt, Rod and Hoop. Net tons.	Product of Sheet and Plate, except Nail Plate. Net tons.	Product of Nails. Kegs of 100 lbs.	Total Rolled Iron, including Nails. Net tons.
1874.....	31	194,114	52,361	562,995	274,625
1875.....	31	171,178	45,773	442,359	239,069
1876.....	31	189,511	31,488	538,874	247,943
1877.....	31	208,342	30,254	597,806	268,486
1878.....	31	226,687	33,445	444,013	282,333

YEARS.	Number of Blast Furnaces	Make of Pig Iron. Net tons.	Number of Steel Works.	Make of Crucible Steel. Net tons.	Make of all other Steel, including Bessemer Ingots. Net tons.	Total make of Steel. Net tons
1874.....	11	143,660	11*	17,915	6,000	23,915
1875.....	11	131,856	14*	22,942	15,498	38,440
1876.....	11	128,555	14*	25,009	54,467	79,476
1877.....	12	141,749	14*	24,747	82,401	107,148
1878.....	12	217,299	14*	27,866	106,948	134,814

* Bessemer steel included; four of these works are also iron rolling mills.

The fact is worthy of record, that during 1878, there was a greater number of miles of railway built in America, than for any year since 1873. The details are given below, and are all collated from the *Railroad Gazette*:

Year.	Miles completed.	Year.	Miles completed.
1878.....	2,620	1874.....	2,025
1877.....	2,281	1873.....	3,883
1876.....	2,460	1872.....	7,340
1875.....	1,561		

During the year just ended, Minnesota built 338 miles; Iowa, 255; Colorado, 193, of which 86 were of three-foot gauge; Pennsylvania, 182; New York, 142; Texas, 118; and at the other extreme, New Jersey, but three miles; Massachusetts, six, and Arkansas, seven.

IMMIGRATION INTO THE UNITED STATES, 1820-1878.

Prior to the year 1820, no statistics of immigration were officially kept. By the act of Congress of March 2, 1819, collectors of customs were required to keep a record and make a quarterly return to the Treasury of all passengers arriving in their respective districts from foreign ports; and these reports, published from time to time by the officers of the Treasury Department, constitute the sources of information as to the growth and progress of immigration. The total number of foreign-born passengers arriving at the ports of the United States, in the several years from 1820 to 1870, inclusive, is given below.

Year.	Total Immigration.	Year.	Total Immigration.	Year.	Total Immigration.
1820.....	8,385	1841.....	80,289	1862.....	91,987
1821.....	9,127	1842.....	104,565	1863.....	176,282
1822.....	6,911	1843.....	52,496	1864.....	193,416
1823.....	6,354	1844.....	78,615	1865.....	249,061
1824.....	7,912	1845.....	114,371	1866.....	318,494
1825.....	10,199	1846.....	154,416	1867.....	298,358
1826.....	10,837	1847.....	234,968	1868.....	297,215
1827.....	18,875	1848.....	266,527	1869.....	395,922
1828.....	27,382	1849.....	297,924	1870.....	378,796
1829.....	22,520	1850.....	369,980	1871.....	367,789
1830.....	23,322	1851.....	379,466	1872.....	449,483
1831.....	22,633	1852.....	371,603	1873.....	437,004
1832.....	60,482	1853.....	368,645	1874.....	277,593
1833.....	58,640	1854.....	427,853	1875.....	209,036
1834.....	65,365	1855.....	200,887	1876.....	182,027
1835.....	45,374	1856.....	200,436	1877.....	149,020
1836.....	76,242	1857.....	251,306	1878 (6 months, January to June)...	88,241
1837.....	79,340	1858.....	123,126		
1838.....	38,914	1859.....	121,282		
1839.....	68,069	1860.....	153,640	Total.....	9,754,068
1840.....	84,066	1861.....	91,920		

NOTE.—The above figures, from 1850 to 1877, are for calendar years—January 1st to December 31st. Other statements of immigration vary, being for fiscal years ending June 30th. Another source of variation is that some tables give the total number of aliens arriving in the United States; others what is called the *net* immigration only. As the latter is not ascertainable for all the years, the figures above given represent the total immigration of aliens in each year.

CHINESE IMMIGRATION INTO THE UNITED STATES FOR EACH CALENDAR YEAR FROM 1855 TO 1876, INCLUSIVE.

Year.	Number.	Year.	Number.	Year.	Number
1855.....	3,526	1864.....	2,795	1873.....	18,154
1856.....	4,733	1865.....	2,942	1874.....	16,651
1857.....	5,944	1866.....	2,385	1875.....	19,033
1858.....	5,128	1867.....	3,863	1876.....	16,879
1859.....	3,457	1868.....	10,684	1877.....	10,379
1860.....	5,467	1869.....	14,902	1878 (January to June)	6,269
1861.....	7,518	1870.....	11,943		
1862.....	3,633	1871.....	6,039	Total.....	200,110
1863.....	7,214	1872.....	10,642		

NOTE.—The statement is made that nearly one-half of all the Chinese who have arrived in the United States have returned to their native country.

**FIRES IN FIFTEEN YEARS—LIST OF THE MOST DESTRUCTIVE FIRES IN ALLEGHENY COUNTY
SINCE 1864—GROSS LOSS NEARLY \$10,500,000—INSURANCE NEARLY \$6,000,000.**

Mr. James E. Stevenson, late Fire Marshal, has favored us with a list of the principal losers by fire in Allegheny County from August 20th, 1864, to March 23d, 1879, as follows:

Year 1864.

	<i>Gross Loss.</i>	<i>Ins. Paid.</i>
Chess, Smythe & Co.....	\$ 93,070	\$ 56,925

Year 1865.

J. Y. McLaughlin & Co.....	\$ 40,000	\$ 10,200
Reese, Graff & Dull.....	11,000	11,000
R. J. Baxter.....	20,000	7,500
Gregg, Alexander & Co.....	31,000	6,000
Joseph L. Hezlep.....	20,000	11,000
Spencer & McKay.....	36,425	36,425
Hubbard & Long, et al.....	12,379	12,379
Brewer, Burke & Co.....	13,889	13,889
Woolridge & Atwood.....	22,000	22,000
Ardesco Oil Refinery.....	70,463	50,882
Graff, Bennett & Co.....	47,000	17,000
A. H. English & Co.....	9,439	9,439
Wilson, Carr & Co.....	8,566	8,566
John C. Lappe.....	60,000	26,800
Do. other losses.....	33,000	8,000

Year 1866.

Citizen's Passenger Railway.....	\$ 24,000	\$ 11,781
Dickson, Marshall & Co.....	16,200	16,200
Kauffman & Oppenheimer.....	21,897	21,897
Fahnestock, Hazlet & Schwartz.....	11,124	7,700
Oluhausen & Crawford.....	10,548	9,500
John Heath et al.....	41,300	14,000
Pittsburgh Forge & Iron Co.....	12,000	10,000
Guthrie & Sill.....	31,215	21,000
Pittsburgh Acid Co.....	53,625	26,551
Kier & Mitchell et al.....	12,200	11,000
P. Weisenberger & Co.....	13,000	8,000
Lafayette Hall.....	50,842	41,221
Union Iron Company.....	14,000	9,600
Hayes & Stewart et al.....	35,000	25,236
Wormser, Myers & Co.....	68,000	27,800
Ardesco Oil Co.....	35,000	18,034
Laughlin & Co.....	65,000	12,875
James Benny.....	20,800	15,000
W. & D. Rinehart.....	22,648	22,648
Fleming, Torrence & Co.....	33,069	23,069
Fry & Scott.....	28,396	27,622

Year 1867.

White, Berger & Co.....	\$ 16,000	\$ 8,000
Chess, Smythe & Co.....	47,153	45,000
Atlas Works.....	18,000	13,230
Miller, Barr & Parkin.....	20,231	10,000
Lafferty & Co. et al.....	27,000	11,865
Wood & Lukens.....	16,000	8,373
O'Hara & Robinson.....	11,549	11,549
Gillespie & Mitchell.....	77,000	6,000
Collins & Wright.....	16,534	16,534
Reese, Graff & Dull.....	22,000	14,850
W. W. Wallace.....	50,000	5,440
Zug & Co.....	17,000	12,830

Year 1868.

A. H. English & Co. et al.....	\$117,563	69,853
Stueckrath & Co.....	15,000	15,000
Pittsburgh Bolt Company.....	50,000	37,999
William Semple.....	6,300	6,300
Fulton, Bolman & Co.....	119,000	92,719
Vesta Oil Works.....	33,500	18,300
J. & W. Gaskell.....	18,012	18,012
Strub & Zahringer.....	7,135	4,510
Bellevue Church.....	18,300	14,800

Year 1869.

Pittsburgh Glass Company.....	\$ 10,000	\$ 9,765
Evans, Clow, Dalzell & Co.....	30,800	19,843
James Bown.....	8,913	7,032
Hiawatha House.....	24,535	6,535
Semple, Reynolds & Co.....	21,561	15,646
La Belle Steel Works.....	27,187	16,689
Forsythe Bros. & Co.....	220,680	71,987
House of Refuge Shops.....	13,000	7,500
John F. Wolfe et al., McK'pt.....	33,757	14,745
Pennsylvania Salt Co.....	25,000	17,511
Cubbage & Ferguson.....	15,000	8,100
Armstrong Bros. & Co.....	16,134	9,506
Frazier Bros.....	23,000	9,000

Gross Loss. Ins. Paid.

S. J. & J. N. Large.....	22,183	7,183
A. H. Childs & Co.....	157,088	115,500
A. Hartupce.....	6,550	6,550
Little & Baird.....	28,350	27,350
Fifth Ward School, Allegheny.....	26,500	26,500
George Smith & Co.....	16,600	10,040

Year 1870.

Mellinger, Estep & Co.....	\$ 11,443	\$ 6,193
Livingston Brothers.....	16,000	7,454
Douglass & Hayes.....	19,000	6,801
Jackson, McEwen & Co.....	7,650	7,650
Sharpsburg Bridge.....	45,000	35,000
Porsythe Brothers.....	13,500	7,500
Ring Oil Company.....	83,000	20,000
National & Citizens' Oil Company.....	33,245	33,245
H. W. C. Tweddle.....	75,000	70,235
Kirkpatrick & Co.....	11,500	11,500
Reese, Graff & Dull.....	6,300	5,276
James Callery et al.....	34,500	23,210
Pittsburgh Tanning Co. et al.....	22,000	18,742
Kennedy & Brother.....	109,233	78,432
John B. Kennedy.....	7,150	7,150
Jones & Nimick.....	157,000	60,000
Chambers & Co.....	11,987	11,987

Year 1871.

Lane Brothers et al.....	\$ 21,183	\$ 19,183
Smith & Porter et al.....	82,000	39,395
Rylay & Robinson.....	20,000	7,000
Howard & Son et al.....	85,000	29,500
St. Bridget's R. C. Church.....	27,000	15,000
Eleventh Ward School House.....	9,200	9,200
Bailey, Farrell & Co.....	17,200	17,200
W. D. Wood & Co.....	25,000	14,200
Jacob Franz.....	8,000	.....
Sampson's Heirs.....	9,000	.....
Wm. McKee & Co.....	24,800	21,800
George G. Miller.....	30,000	.....
McKnight & Co.....	56,585	56,585
H. M. Bole.....	45,000	13,000

Year 1872.

Jones & Laughlin.....	\$169,435	\$ 82,500
D. P. Reighard.....	10,000	.....
Waring and others.....	15,000	.....
B. L. Fahnestock.....	75,143	51,595
W. B. Lupton & Co.....	20,900	8,700
Hartje, Wylie & Co.....	90,694	55,000
Joseph Walton.....	20,000	5,000

Year 1873.

Hamilton, Lemon & Co.....	\$ 38,960	\$ 24,977
William Graff & Co.....	41,000	41,000
National Tube Works.....	103,372	40,500
Arbuckle & Co.....	10,649	10,649
J. K. Moorhead.....	\$ 44,525	\$ 39,523
Keefer & Herchenrother et al.....	51,804	26,604
Mulen, Steen & Co.....	11,455	9,455
Freeman & Burger.....	28,214	16,000
George W. Jordan.....	10,000	.....
J. W. Lewis.....	33,000	10,162
W. Smith & Son.....	13,612	13,612
John Phillips.....	13,000	12,500
Stewart, Cook & Co.....	14,267	14,267
G. E. Williams & Co.....	10,907	10,907

Year 1874.

Bellevue School House.....	\$ 11,000	\$ 7,000
A. Garrison.....	10,000	.....
Pittsburgh Car Works.....	16,453	16,453
Appe & Rogers, and others.....	83,350	23,900
Allegheny Car Company.....	25,000	14,250
W. Frank & Sons.....	23,330	22,530
Great Allegheny Fire.....	244,709	111,824
Standard Oil Works.....	40,000	27,253
Fairview Oil Works.....	43,729	43,729
Reese, Owens & Co.....	26,918	26,918
John Appel et al.....	23,582	7,632
Oil Works, Herr's Island.....	30,700	5,000
R. P. Burgan et al.....	14,000	14,000
Wilkins Hall.....	10,525	7,000

Year 1875.

	Gross Loss.	Ins. Paid.
Whitmore, Wolf & Co. et al.....	\$ 54,236	\$ 54,236
Elkins & Flack.....	18,000	13,608
Harlin's Color Works.....	10,000	10,000
County Workhouse.....	60,000	22,700
Hussey, Binns & Co.....	18,000	13,314
Brilliant Oil Works.....	75,000	58,950
Bown & Sons fire.....	107,525	90,927
J. B. Young & Co.....	10,720	10,720

Year 1876.

South Side Flour Mill.....	\$ 42,147	\$ 24,337
Paine, Ahlett & Tripp et al.....	35,995	31,684
Tarentum Camp Ground.....	35,000	7,730
Berger's Bucket Factory.....	15,000	10,000
National Tube Works.....	10,500	10,500
American Oil Works Tank.....	20,705	20,705
Lindsay & McCutcheon.....	30,000	27,612
Frame Row, Mansfield.....	15,970	11,580
W. Flacous & Son.....	15,944	15,944
La Belle Steel Works.....	156,500	55,000

Year 1877.

Fort Pitt Boiler Works.....	\$ 46,495	\$ 19,045
Mansfield & Co.....	20,000	16,735
Davis, Chambers & Co.....	55,923	45,408
Pittsburgh Steel Company.....	23,788	23,788
Jacobus & Nimick.....	132,468	91,570
John A. McKee & Sons.....	35,807	25,795
A. Hartupée & Co.....	104,631	84,683
McKeesport Car Works.....	94,145	65,610
Gilmore & Co.....	16,060	15,779
Pittsburgh Dispatch et al.....	28,845	21,061

Year 1878.

	Gross Loss.	Ind. Paid.
Fleming, Agnew & Co.....	\$ 40,295	\$ 29,585
Hays Coal Co., tippie.....	10,000	.....
G. McKee et al., planing mill.....	11,184	8,824
Armstrong Bros. & Co., cork factory.....	70,900	56,939
Lewis, Oliver & Phillips, foundry.....	11,066	7,098
Pittsburgh Wagon Works Shop.....	32,575	1,406
Reymner Bros., candy factory.....	24,662	24,662

Recapitulation.

Comparative statement of the number of fires, gross loss, and insurance paid from August 20, 1864, to March 23, 1879, the year ending the fourth Monday of March in each case.

	No. of Fires.	Gross Loss.	Insurance Paid.
1865 (7 months).....	33	\$ 266,128	\$ 126,481
1866.....	64	741,225	336,014
1867.....	81	868,150	500,528
1868.....	77	815,559	311,264
1869.....	122	625,842	385,405
1870.....	127	852,564	433,092
1871.....	296	1,349,727	684,799
1872.....	298	664,212	355,472
1873.....	326	520,298	271,566
1874.....	198	667,528	419,097
1875.....	302	809,385	512,328
1876.....	322	654,667	490,330
1877.....	271	548,944	347,426
1878.....	362	757,316	530,174
1879.....	245	324,812	205,607
Totals.....	3,124	\$ 10,481,387	\$ 5,909,787

Statistics of THE AMERICAN IRON TRADE, and of THE PITTSBURGH IRON TRADE, For 1877 and 1878.

PRODUCTS.	United States. NET TONS.		Allegheny Co., Pa. NET TONS.	
	1877.	1878.	1877.	1878.
Production of Pig Iron,.....	2,314,585	2,577,361	141,749	217,299
Stocks of Pig Iron unsold, Dec. 31,.....	642,351	574,565	6,470	10,080
Production of bars, angles, bolts, rods & hoops.....	720,531	830,837	206,171	224,248
Production of Plates and Sheets,.....	182,242	182,042	30,254	33,445
Production of Nails in kegs,.....	4,828,918	4,396,130	597,806	444,013
Production of Iron Rails,.....	332,540	322,890	2,171	2,439
Production of Bessemer Steel Rails,.....	432,169	550,398	54,685	72,246
Production of Open-hearth Steel Rails,.....	.....	9,397	.....	.....
Total production of Rails,.....	764,709	882,685	56,856	74,685
Production of Bessemer Steel Ingots,.....	560,587	732,226	73,278	99,344
“ of Crucible Cast Steel,.....	40,430	42,906	24,747	27,866
“ of Open-hearth Steel Ingots,.....	25,031	36,126	800	1,025
“ of all other Steel,.....	11,924	8,556	8,323	6,579
“ of Spiegeleisen (included in pig iron above),.....	8,845	10,674	.....	.....
“ of Blooms from Ore and Pig Iron.....	47,300	50,045	.....	.....

ADDITIONAL STATISTICS.

	United States.	
	1877.	1878.
Value of Iron and Steel Imports,.....	\$9,195,368	\$8,943,043
Value of Iron and Steel Exports,.....	16,659,675	13,260,369
Miles of Railway constructed,.....	2,177	2,747
Number of Immigrants,.....	130,503	153,207
Production of Lake Superior Iron Ore in Gross Tons,.....	1,025,129	1,125,231
Tonnage of Iron Ships built (in fiscal years),.....	5,927	26,960
Net Imports of Merchandise (in fiscal years),.....	\$438,518,130	\$422,895,034
Domestic Exports of Merchandise (in fiscal years),.....	589,670,224	680,709,258
Net Imports of Specie (in fiscal years),.....	27,746,915	23,134,074
Domestic Exports of Specie (in fiscal years),.....	43,134,738	27,061,885

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**WHOLESALE STORE PRICES IN DOLLARS OF BEST REFINED ROLLED BAR IRON IN PHILADELPHIA,
FROM 1844 TO 1879. PER TON OF 2,240 POUNDS.**

YEARS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.
1844.....	\$ 90 00	\$ 90 00	\$ 90 00	\$ 90 00	\$ 90 00	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 85 62
1845.....	\$ 81 50	\$ 87 50	\$ 92 50	\$ 100 00	\$ 100 00	\$ 100 00	\$ 95 00	\$ 92 50	\$ 92 50	\$ 92 50	\$ 95 00	\$ 95 00	\$ 93 75
1846.....	\$ 95 00	\$ 95 00	\$ 90 00	\$ 92 50	\$ 92 50	\$ 92 50	\$ 95 00	\$ 92 50	\$ 90 00	\$ 90 00	\$ 90 00	\$ 85 00	\$ 91 66
1847.....	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 96 00	\$ 90 00	\$ 85 00	\$ 87 50	\$ 85 00	\$ 85 00	\$ 85 00	\$ 86 01
1848.....	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 80 00	\$ 80 00	\$ 80 00	\$ 75 00	\$ 75 00	\$ 75 00	\$ 70 00	\$ 79 33
1849.....	\$ 70 00	\$ 70 00	\$ 70 00	\$ 70 00	\$ 70 00	\$ 70 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 67 00
1850.....	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 57 50	\$ 57 50	\$ 57 50	\$ 57 50	\$ 57 50	\$ 56 00	\$ 56 00	\$ 59 84
1851.....	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 65 00	\$ 55 00	\$ 55 00	\$ 55 00	\$ 54 00	\$ 54 00	\$ 54 00	\$ 54 00	\$ 54 06
1852.....	\$ 54 00	\$ 54 00	\$ 52 50	\$ 52 50	\$ 52 50	\$ 52 50	\$ 52 50	\$ 55 00	\$ 60 00	\$ 70 00	\$ 70 00	\$ 80 00	\$ 68 79
1853.....	\$ 90 00	\$ 90 00	\$ 90 00	\$ 87 50	\$ 85 00	\$ 80 00	\$ 80 00	\$ 77 50	\$ 77 50	\$ 80 00	\$ 80 00	\$ 85 00	\$ 83 50
1854.....	\$ 90 00	\$ 90 00	\$ 90 00	\$ 90 00	\$ 90 00	\$ 92 50	\$ 95 00	\$ 95 00	\$ 95 00	\$ 92 50	\$ 90 00	\$ 90 00	\$ 91 33
1855.....	\$ 82 50	\$ 80 00	\$ 75 00	\$ 72 50	\$ 70 00	\$ 70 00	\$ 70 00	\$ 72 50	\$ 72 50	\$ 75 00	\$ 77 50	\$ 77 50	\$ 74 68
1856.....	\$ 75 00	\$ 77 50	\$ 77 50	\$ 77 50	\$ 75 00	\$ 72 50	\$ 70 00	\$ 70 00	\$ 72 50	\$ 72 50	\$ 72 50	\$ 72 50	\$ 73 75
1857.....	\$ 72 50	\$ 72 50	\$ 72 50	\$ 72 50	\$ 72 50	\$ 72 50	\$ 70 00	\$ 70 00	\$ 70 00	\$ 70 00	\$ 70 00	\$ 67 00	\$ 71 01
1858.....	\$ 65 00	\$ 65 00	\$ 65 00	\$ 62 50	\$ 62 50	\$ 65 00	\$ 65 00	\$ 65 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 62 29
1859.....	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00
1860.....	\$ 60 00	\$ 57 50	\$ 57 50	\$ 57 50	\$ 57 50	\$ 57 50	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 58 75
1861.....	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 60 00	\$ 62 50	\$ 62 50	\$ 62 50	\$ 62 50	\$ 60 83
1862.....	\$ 62 50	\$ 62 50	\$ 62 50	\$ 62 50	\$ 65 00	\$ 65 00	\$ 70 00	\$ 72 50	\$ 75 00	\$ 77 50	\$ 82 50	\$ 87 50	\$ 70 42
1863.....	\$ 87 50	\$ 90 00	\$ 90 00	\$ 90 00	\$ 90 00	\$ 87 50	\$ 87 50	\$ 87 50	\$ 87 50	\$ 90 00	\$ 95 00	\$ 110 00	\$ 91 04
1864.....	\$ 115 00	\$ 125 00	\$ 130 00	\$ 140 00	\$ 150 00	\$ 160 00	\$ 165 00	\$ 170 00	\$ 160 00	\$ 150 00	\$ 147 50	\$ 145 00	\$ 146 46
1865.....	\$ 142 50	\$ 135 00	\$ 130 00	\$ 110 00	\$ 100 00	\$ 92 50	\$ 90 00	\$ 85 00	\$ 92 50	\$ 95 00	\$ 100 00	\$ 105 00	\$ 106 38
1866.....	\$ 105 00	\$ 100 00	\$ 97 50	\$ 95 00	\$ 92 50	\$ 95 00	\$ 105 00	\$ 100 00	\$ 100 00	\$ 97 50	\$ 95 00	\$ 95 00	\$ 98 13
1867.....	\$ 95 00	\$ 92 50	\$ 92 50	\$ 90 00	\$ 87 50	\$ 87 50	\$ 85 00	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 85 00	\$ 87 03
1868.....	\$ 85 00	\$ 85 00	\$ 85 00	\$ 87 50	\$ 87 50	\$ 87 50	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 00	\$ 85 63
1869.....	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 82 50	\$ 80 00	\$ 80 00	\$ 80 00	\$ 80 00	\$ 81 66
1870.....	\$ 80 00	\$ 77 50	\$ 77 50	\$ 77 50	\$ 75 00	\$ 77 50	\$ 80 00	\$ 85 00	\$ 82 50	\$ 80 00	\$ 77 50	\$ 77 50	\$ 78 96
1871.....	\$ 72 50	\$ 75 00	\$ 75 00	\$ 75 00	\$ 75 00	\$ 77 50	\$ 77 50	\$ 80 00	\$ 82 50	\$ 82 50	\$ 82 50	\$ 85 00	\$ 78 54
1872.....	\$ 73 92	\$ 78 40	\$ 87 36	\$ 91 08	\$ 96 32	\$ 98 56	\$ 103 04	\$ 105 28	\$ 107 52	\$ 118 72	\$ 107 52	\$ 100 80	\$ 97 63
1873.....	\$ 96 32	\$ 94 03	\$ 96 32	\$ 91 08	\$ 94 03	\$ 91 84	\$ 85 12	\$ 82 88	\$ 80 64	\$ 76 16	\$ 73 92	\$ 71 68	\$ 80 43
1874.....	\$ 73 92	\$ 73 92	\$ 71 08	\$ 71 68	\$ 67 20	\$ 67 20	\$ 63 72	\$ 67 20	\$ 67 20	\$ 67 20	\$ 67 20	\$ 62 72	\$ 67 95
1875.....	\$ 62 72	\$ 60 48	\$ 62 72	\$ 62 72	\$ 62 72	\$ 62 72	\$ 62 72	\$ 60 48	\$ 60 48	\$ 60 48	\$ 60 48	\$ 56 00	\$ 60 85
1876.....	\$ 56 00	\$ 52 64	\$ 52 64	\$ 52 64	\$ 52 64	\$ 52 64	\$ 52 64	\$ 52 64	\$ 50 40	\$ 50 40	\$ 50 40	\$ 49 24	\$ 52 03
1877.....	\$ 48 72	\$ 47 60	\$ 47 60	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 45 65
1878.....	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 44 80	\$ 42 56	\$ 42 56	\$ 42 56	\$ 44 24
1879.....	\$ 40 32	\$ 42 56	\$ 44 80	\$ 44 80									

The highest price in any month in the above table was reached in August, 1851, \$170; the lowest price in any month was in January, 1879, \$40.32. The highest average price reached in any year was in 1864, \$146.46; the lowest average price in any year was in 1878, \$44.24. Previous to the present era of low prices, the lowest point touched was \$52.50 in March to July, 1852; and the lowest average reached in any year was \$54.66 in 1851.

PRODUCTION OF ANTHRACITE COAL.

The following figures of the production of anthracite coal are taken from a table prepared for the *Coal Trade Journal* by John H. Jones. The aggregate amount of anthracite marketed according to this statement foots up over 807,000,000 tons:

Year.	Tons.	Year.	Tons.
1820.....	365	1859.....	3,353,799
1821.....	1,073	1860.....	4,448,916
1822.....	3,220	1861.....	4,893,471
1823.....	6,951	1862.....	5,195,151
1824.....	11,108	1863.....	6,202,334
1825.....	34,893	1864.....	6,008,567
1826.....	48,047	1865.....	6,227,550
1827.....	63,434	1866.....	6,644,941
1828.....	77,516	1867.....	6,839,360
1829.....	112,083	1868.....	7,808,255
1830.....	174,734	1869.....	8,513,123
1831.....	176,800	1870.....	7,954,264
1832.....	263,271	1871.....	7,869,497
1833.....	487,749	1872.....	9,506,006
1834.....	376,636	1873.....	10,177,475
1835.....	560,758	1874.....	9,632,391
1836.....	634,117	1875.....	12,703,882
1837.....	869,441	1876.....	12,988,725
1838.....	738,697	1877.....	13,801,465
1839.....	818,402	1878.....	13,866,180
1840.....	864,379	1879.....	16,182,191
1841.....	959,773		15,639,721
1842.....	1,108,412		19,663,778
1843.....	1,263,598		21,227,952
1844.....	1,630,850		20,145,121
1845.....	2,013,013		19,712,472
1846.....	2,314,005		18,501,011
1847.....	2,882,309		20,828,178
1848.....	2,089,238		17,605,262
1849.....	3,242,966		

EXPORTS OF COAL.

Shipments of coal to foreign ports, for the fiscal year ending June 30, 1878:

Countries.	Anthracite.	Bituminous.
Austria.....	202	
Brazil.....	1,850	533
Central American States.....	11	91
Chili.....	1,093	510
China.....	3,659	
Danish West Indies.....	1,497	11,360
France.....	764	
French West Indies and French Guiana.....	240	615
Miquelan, Langley and St Pierre Islands.....	30	
French Possessions, all other.....	.....	1
Nova Scotia, New Brunswick and Prince Edward Island.....	30,395	5,453
Quebec, Ontario, Manitoba and Northwest Territory.....	268,378	214,982
British Columbia.....	17	22
Newfoundland and Labrador.....	98	
British West Indies and Honduras.....	1,471	1,222
British East Indies.....	454	
Hong Kong.....	1,359	
British Possessions in Australasia.....	10	
Hawaiian Islands.....	842	257
Hayti.....	.....	713
Italy.....	2,360	16
Japan.....	706	
Mexico.....	756	3,144
Dutch East Indies.....	101	
Peru.....	1,878	
Azore, Madeira and Cape Verde Islands.....	325	
San Domingo.....	434	297
Cuba.....	17,983	62,613
Porto Rico.....	43	32
United States of Columbia.....	3,373	17,431
Venezuela.....	630	631
Total.....	340,661	319,477

INTERNAL REVENUE, TWENTY-SECOND PA. DISTRICT.

The following tabulated statements of the revenue derived from spirits, tobacco, fermented liquors, banks, bankers, &c., for the years ending June 30, 1878, and June 30, 1879, is compiled from the reports of Hon. Thomas W. Davis, Collector of Internal Revenue for the Twenty-second Pennsylvania District:

FOR THE FISCAL YEAR ENDING JUNE 30, 1878.

1877.	Spirits.	Tobacco.	Fermented Liquors.	Banks and Bankers.	Collections otherwise.	Penalties.	Total.
July.....	\$ 30,578 54	\$ 26,654 71	\$ 8,622 89	\$44,220 22	.....	\$ 27	\$ 110,076 63
August....	38,411 67	29,215 44	6,791 07	276 15	\$295 26	233 41	75,223 00
Sept'ber...	52,655 11	28,202 88	6,269 40	271 50	.....	19 77	87,418 66
October...	72,008 82	30,863 32	7,016 74	.....	.....	5 00	109,893 88
November...	36,061 57	30,617 48	6,549 81	.....	.....	2,801 12	76,029 98
December...	91,715 27	30,391 81	7,570 67	.....	.....	178 94	129,856 69
1878.							
January...	67,300 81	30,363 32	5,372 17	45,401 22	.....	86 83	148,524 35
February...	56,600 41	25,030 06	5,835 15	.....	.....	395 68	87,861 30
March....	61,240 19	29,691 24	7,699 30	100 10	120 24	8 58	98,859 65
April.....	45,989 43	40,779 52	8,841 75	.....	72 33	262 31	95,945 34
May.....	34,417 35	39,944 93	10,330 01	.....	.....	19 85	94,712 14
June.....	16,244 36	27,912 95	7,283 21	.....	132 75	143 24	51,716 51
Total.....	\$603,223 53	\$369,677 66	\$88,182 17	\$90,269 19	\$620 58	\$4,155 00	\$1,156 118 13

FOR THE FISCAL YEAR ENDING JUNE 30, 1879.

1878.	Spirits.	Tobacco.	Fermented Liquors.	Banks and Bankers.	Other Collections.	Penalties.	Total.
July.....	\$ 10,883 03	\$ 31,797 52	\$ 9,643 52	\$40,865 20	.....	\$ 3 33	\$ 93,192 60
August....	16,169 98	31,821 77	8,132 73	.....	3,052 33	.....	59,176 81
Sept'ber...	17,179 09	30,768 35	7,144 54	.....	.....	6 63	55,098 61
October...	31,839 40	30,689 42	7,594 95	.....	.....	1 26	70,125 03
November...	53,618 92	30,452 94	6,095 41	.....	.....	81 64	90,248 91
December...	28,035 17	27,940 56	6,318 10	.....	.....	.....	62,293 83
1879.							
January...	25,902 66	29,130 15	5,771 00	38,121 66	108 72	.....	99,034 19
February...	28,364 30	22,777 32	5,033 11	.....	.....	3 06	56,177 79
March.....	32,459 98	28,521 70	6,891 35	.....	147 44	16 79	68,037 26
April.....	119,321 25	40,588 56	9,708 50	.....	36 91	.....	169,655 22
May.....	59,490 13	44,971 34	12,271 37	.....	.....	.....	116,732 84
June.....	24,338 98	27,275 43	11,335 16	.....	.....	5 00	62,954 57
	\$147,602 89	\$376,735 06	\$95,939 74	\$78,986 86	3,345 40	\$117 71	\$1,002,727 66

YEARLY PRICES OF COAL.

We give below prices for Schuylkill White Ash Lump coal, on board vessels at Philadelphia, from 1834 to 1878, inclusive, prepared originally by W. G. Neilson, and continued by J. M. Swank, being the average rates obtained from sales during the year:

Years.	Prices.	Years.	Prices.	Years.	Prices.	Years.	Prices.
1834.....	\$1 84	1845.....	\$3 46	1856.....	\$4 11	1867.....	\$4 37
1835.....	4 84	1846.....	3 90	1857.....	3 87	1868.....	3 86
1836.....	6 64	1847.....	3 80	1858.....	3 43	1869.....	5 31
1837.....	6 72	1848.....	3 50	1859.....	3 25	1870.....	4 39
1838.....	5 27	1849.....	3 62	1860.....	3 40	1871.....	4 46
1839.....	5 00	1850.....	3 64	1861.....	3 39	1872.....	3 74
1840.....	4 91	1851.....	3 31	1862.....	4 14	1873.....	4 27
1841.....	5 79	1852.....	3 46	1863.....	6 06	1874.....	4 55
1842.....	4 18	1853.....	3 70	1864.....	18 39	1875.....	4 39
1843.....	3 27	1854.....	5 19	1865.....	7 86	1876.....	3 87
1844.....	3 20	1855.....	4 49	1866.....	5 80	1877.....	*2 59
						1878.....	3 25

*Lowest average for year.

† Highest average for year.

THE LEGAL TON AND BUSHEL IN PENNSYLVANIA.

The Legislature of Pennsylvania have enacted in reference to what constitutes a bushel or a ton of Bituminous coal.

SECTION 1. That from and after the passage of this act, the standing weight of Bituminous coal in this Commonwealth, shall be seventy-six pounds to the bushel, and two thousand pounds shall be one ton.

SECTION 2. If any person or persons engaged in the business of mining Bituminous coal, shall fix or establish any other number of pounds by agreement or contract to be a bushel of Bituminous coal, than is provided for in the first section of this act, such person or persons shall be guilty of misdemeanor; and upon conviction thereof shall be sentenced to pay a fine not less than five hundred, and not exceeding one thousand dollars, and all penalties recovered under this act shall be paid into the treasury of the State.

THE BUSINESS AND POPULATION OF PITTSBURGH.

In the preparation of a work of this description, much difficulty is experienced in obtaining reliable statistics, and no doubt the larger number of fault-finders will be those who have refused to give our reporters information relative to their business through fear of tax-collectors, revenue officers, or from an inexcusable stupidity or want of enterprise and business sagacity. We have spared no effort or expense to make this work the most complete compendium of the business interests of Pittsburgh and Allegheny ever published, and all failures must be attributed to parties who have refused to aid us by their co-operation. We append herewith a tabulated statement of the number of firms and establishments engaged in the different branches of business, carefully compiled from the Pittsburgh Directories of 1866, 1876 and 1879. While we do not claim that the numbers given are perfectly accurate, we believe that in most branches of business they will show a favorable increase; and where any decrease may appear we have no doubt it is owing to the failure on the part of the Directory agents to obtain the full information desired. The population of Pittsburgh and Allegheny, as shown by the United States Census, was, in 1840, 81,155; in 1850, 138,290; in 1860, 178,831; in 1870, 262,201. It is estimated now, by the most reliable judges, that, in 1880, the population will amount, in round numbers, to fully 350,000. While, at times, during the past decade, the various branches of business carried on in Pittsburgh and its environs have been temporarily affected by the general stagnation of business in all parts of the country, the indications are now favorable for a steady and gratifying increase in all the industrial pursuits which have given to Pittsburgh a world-wide reputation as a great manufacturing and producing metropolis.

BUSINESS STATISTICS OF PITTSBURGH.

	1866	1876	1879		1866	1876	1879		1866	1876	1879
Acid Manufacturers.....	3	1	2	Blk. Lead Crucibles.....	2	2	3	Cement	6	6	7
Advertising Agents.....	4	3	3	Block Makers.....	3	3	2	Chain Mfrs.....	2	4	3
Agricultural Impl....	6	7	9	Boat Stores.....	5	2	2	Cheese.....	4	4	3
" Steels & Irons.....	1	2	4	Boiler Makers.....	6	15	15	Chemicals.....	6	6	4
Air Brakes.....	...	1	1	Bolts and Nuts.....	3	4	7	Chemists.....	...	1	2
Air Furnaces.....	...	3	4	Book & Job Printers.....	14	36	43	Children's Carriages.....	3	5	6
Aldermen.....	12	78	49	Booksellers and Stationers.....	10	34	31	China Queens Ware and Glass Ware.....	3	11	11
Ale, Bottled.....	3	3	5	Boots and Shoes, retail.....	10	151	150	Civil Engineers.....	2	11	11
Anthracite Coal.....	3	2	4	do., wholesale.....	16	9	9	Claim Agencies.....	2	2	2
Architects.....	4	17	13	Boot & Shoe Makers.....	10	85	146	Clothing—Retail.....	12	37	41
Artific. Limbs & Truss.....	1	2	2	Bottlers.....	1	4	10	" —Wholesale.....	6	4	8
Artists.....	6	16	12	Box Factories.....	2	10	18	Cloths & Cassemeres.....	4	5	6
" Materials.....	2	2	2	Brass Foundries.....	12	14	18	Coal and Coke.....	23	89	96
Attorneys.....	91	279	313	Brass Goods.....	2	2	5	Coffee Roasters.....	3	3	5
Auctioneers.....	2	8	8	Brewers.....	11	19	26	Coke.....	3	13	11
Awnings.....	2	5	7	Brick Layers & Jobbers.....	4	3	10	Commis. Agencies.....	24	44	47
Axle & Roll Grease.....	2	2	3	Bridge Builders.....	2	2	4	Confectioners—Retail.....	9	26	24
Axles.....	3	5	5	Brokers—Stock & Bill.....	7	29	28	" —Wholesale.....	2	10	10
Bakers.....	16	108	86	Broom Mfrs.....	2	6	5	Contractors.....	6	17	8
Baking Powder.....	1	2	2	Brush Mfrs.....	1	7	8	Cooperages.....	15	7	9
Bankers.....	11	6	6	Butchers.....	12	148	105	Copper Mfrs.....	2	2	2
Banks.....	26	82	65	Butcher's Tools.....	2	2	2	Copper Pipe Mfrs.....	2	1	2
Barbers.....	16	75	84	Canned Goods.....	2	4	7	Cordage, Oakum and Twine.....	2	4	4
Barge Builders.....	4	2	4	Carpenters & Builders.....	8	52	49	Corks.....	1	1	1
Bell Hangers.....	4	6	11	Carpel Weavers.....	14	12	18	Corrugated Iron.....	1	1	1
Bellows Mfrs.....	3	2	3	Carpets & Oil Cloths.....	5	13	15	Cotton Mills.....	4	4	4
Billiard Rooms.....	2	7	3	Carriage Mfrs.....	3	15	20	Cotton Ties.....	1	1	1
Bill Posters.....	2	4	4					Cotton & Wool Waste.....	2	1	2
Binders and Blank Books.....	5	13	12					Cracker Bakers.....	3	6	4
Blacksmiths.....	16	31	25								

	1866	1870	1879		1866	1870	1879		1866	1870	1879
Curled Hair.....	1	3	1	Lime and Cement.....	3	5	9	Silver & Gold Plating	1	3	2
Cutlery.....	12	36	38	Linsed Oil Mfrs.....	1	2	4	Slate Roofing.....	4	4	5
Dental Depots.....	2	1	2	Liquors—Wholesale.	21	...	21	Soap and Candles.....	3	4	4
Dentists.....	8	30	48	—Retail.....	21	100	105	Soda Ash.....	3	7	10
Dining Rooms.....	20	20	20	Lithographers.....	2	4	3	Spices.....	2	3	4
Distilleries.....	2	6	5	Livery & Sale Stables	12	39	39	Spikes and Rivets...	2	3	3
Dress Makers.....	60	26	51	Locksmiths.....	3	7	8	Springs.....	3	6	8
Druggists.....	29	90	104	Locomotives.....	1	2	2	Stair Builders.....	2	8	7
Drugs—Wholesale...	12	9	10	Looking Glasses and	...	...	...	Staves.....	3	5	5
Dry Goods.....	20	76	76	Picture Frames...	5	11	7	Steamboat Agents...	3	5	7
“ Wholesale	6	9	7	Lubricating Oils.....	2	7	5	Steamboat Joiners...	2	3	3
Dyeing and Scouring	2	15	22	Lumber.....	12	48	51	Steam Fitters.....	2	4	7
Eating Saloons.....	8	24	17	Machinists.....	24	24	33	Steam Pumps.....	3	7	8
Electrotypers.....	...	3	3	Machinist's Supplies	4	7	6	Steamship Agency...	2	8	7
Elevators.....	1	1	2	Malsters.....	3	10	16	Steel.....	7	8	11
Embroideries and	...	...	...	Marbleized Mantels..	2	4	4	Steel Castings.....	...	3	2
Laces.....	7	4	4	Marble Works.....	5	20	18	Steel Stamps.....	...	4	4
Employment Offices	2	6	6	Mercantile Agencies	2	3	3	Stencil Cutters.....	1	5	3
Enamelers.....	1	1	3	Mdse. Brokers.....	...	12	18	Stencil Stock Mfrs...	...	1	2
Engine Builders.....	15	18	31	Merchant Tailors.....	23	106	106	Stenographers.....	1	2	4
Engravers.....	2	5	4	Milliners.....	41	52	77	Stills.....	3	11	14
Express Companies...	1	3	3	Millinery Goods.....	7	5	5	Stone Flagging.....	3	5	5
Fancy Goods.....	...	16	20	Mineral Water.....	2	3	3	Stoves.....	13	12	12
Felt Roofing.....	2	3	3	Mining Co.'s.....	2	10	13	Straw Goods.....	2	4	4
File Works.....	2	3	4	Music Teachers.....	10	10	16	Stucco Workers.....	2	2	3
Fire Brick.....	2	15	16	Nails and Tacks.....	...	1	2	Surveyors.....	1	4	5
Fish.....	3	5	6	Neats Foot Oil.....	2	2	3	Tailor's Trimmings..	2	6	5
Florists.....	1	6	7	Newspapers.....	13	33	41	Tanks (Iron).....	3	12	14
Flour—Wholesale...	11	4	11	Notaries Public.....	3	63	95	Tanners.....	2	8	11
Flour, Grain & Feed.	13	64	65	Notions.....	56	111	50	Teas.....	4	7	11
Flouring Mills.....	4	5	2	“ Wholesale...	3	12	13	Telegraph Co.'s.....	2	2	2
Forges.....	2	4	7	Novelty Works.....	2	3	2	Terra Cotta Ware...	1	4	5
Foreign Fruits.....	2	4	8	Nurserymen.....	2	5	4	Tinners and Tin...	...	...	...
Founders.....	19	33	33	Oculists.....	1	4	5	Copper and Sheet	...	...	...
Fresco Painters...	2	3	6	Oil Cans and Tanks..	6	1	2	Iron Ware.....	11	93	73
Furnace Builders...	2	4	6	Oil Cloths.....	1	13	15	Tinners Stock.....	2	2	2
Furniture.....	11	39	39	Oil Dealers.....	27	23	24	Tobacco Leaf.....	1	5	5
Galv. Iron Cornice...	2	4	3	Oil Refiners.....	13	24	16	Tobacco Mfrs.....	2	5	3
Gas Pipe.....	2	5	4	Opticians.....	2	3	4	Tobacco and Cigars	...	...	...
Gas & Steam Fitters	18	43	66	Oyster Depots.....	2	3	9	—Retail.....	17	189	222
Gas & Water Pipe...	2	5	4	Painters.....	11	70	65	Tobacco and Cigars	...	...	...
Gents' Furnishing	...	...	...	Paper Bags.....	...	2	4	—Wholesale...	2	15	15
Goods.....	6	21	31	Paper Box Mfrs.....	2	5	5	Tow Boat Offices...	2	50	62
Glass Mfrs.....	26	44	41	Paper Mfrs.....	2	8	7	Toys.....	2	6	8
Glass Moulds and	...	...	...	Paper Rags.....	9	3	3	Trimmings.....	8	22	23
Presses.....	3	3	2	Patent Medicines...	5	4	3	Trunks & Valises...	5	4	6
Glass Stainers.....	3	3	3	Patent Solicitors...	2	10	12	Trusses.....	...	3	4
Glue Mfrs.....	1	1	1	Patterns and Models	1	4	6	Undertakers.....	5	31	41
Granite Works.....	2	4	5	Pawn Brokers.....	2	10	11	Upholsters.....	3	12	19
Gravel Roofing...	2	3	10	Photographers.....	7	22	23	Varnish.....	1	1	2
Grist Mill Machin'y	1	2	1	Physicians.....	59	247	237	Veterinary Surgeons	2	5	7
Grocers—Retail...	28	402	342	Pianos and Organs...	6	10	6	Vinegar.....	5	5	5
“ —Wholesale...	30	22	26	Pictures & Frames...	4	9	11	Wagon Makers.....	2	27	32
Gum Hose.....	4	4	8	Planing Mills.....	10	39	30	Wall Paper.....	5	18	19
Gum Packing.....	4	4	6	Plow Mfrs.....	4	3	3	Whip Mfrs.....	1	2	3
Guns and Pistols...	5	4	5	Plumber's Materials	1	2	1	White Lead.....	4	7	7
Hair Goods.....	5	17	15	Pork Packers.....	6	8	9	Window Shades...	2	14	18
Hardware.....	11	36	45	Potteries.....	1	4	5	Wire Works.....	2	4	6
Harness Makers...	3	32	30	Powder Agents.....	1	2	3	Wood Carvers.....	2	1	2
Hats, Caps and Furs.	6	38	31	Publishers.....	2	10	5	Wood Engravers...	1	2	3
Horse Shoers.....	14	33	49	Publisher's Agents...	3	8	4	Wood Turners.....	2	10	7
Hosiery and Gloves.	2	7	12	Pumps.....	3	4	8	Wood & Willow Ware	2	9	10
Hotels.....	21	45	33	Queensware.....	4	11	13	Wood Working	...	...	...
House Furnishing	...	...	...	Railroad Supplies...	1	5	3	Machinery.....	1	3	3
Goods.....	3	14	19	Real Estate.....	11	51	52	Wool.....	3	3	3
Ice Companies.....	1	4	13	Restaurants.....	11	11	12	Woolen Mills.....	3	2	2
Ins. Agts. & Brokers	30	50	70	Ribbons and Silk...	2	3	3	Wrought Iron Pipe...	2	5	5
Ins. Co.'s—Fire...	30	132	126	Rivets.....	2	1	2	Yeast.....	1	1	2
Ins. Co.'s—Life...	39	23	29	Rolls.....	1	2	3	LODGES—	...	...	...
Iron Pipe Fitters...	2	2	3	Roofting Materials...	2	4	6	Masonic.....	15	36	32
Iron Railings, Prison	...	...	...	Rubber Goods.....	2	3	3	Odd Fellows...	28	73	73
Cells, &c.....	2	4	3	Rubber Stamps.....	1	2	2	A. O. U. W.....	...	20	25
Iron Fences and	...	...	...	Saddlery Hardware...	7	7	6	Knights of Pythias	...	36	30
Railings.....	2	1	3	Safe Mfrs.....	2	4	3	G. A. R.....	...	5	8
Iron Roofs, Frames	...	...	...	Saloons.....	13	423	465	I. O. R. M.....	...	13	13
and Roofing...	2	2	3	Salt Works.....	2	2	2	CHURCHES—	...	...	...
Iron & Nail Mfrs...	25	24	27	Sand and Gravel.....	4	5	10	Baptist.....	12	12	12
Japaned Ware.....	...	2	2	Sash & Door Factories	6	25	19	Catholic.....	19	46	49
Jewelers.....	11	65	62	Saw Mills.....	10	10	10	Disciples.....	...	2	2
Keg Factories.....	2	2	4	Saw Mill Mach'y...	2	2	2	Episcopal.....	19	12	13
Kid Gloves.....	2	3	3	Scales.....	1	3	4	Ev. Lutheran...	...	12	15
Lamp Chimneys...	2	1	11	Schools.....	10	55	55	Meth. Episcopal...	29	28	28
Lard Oil Mfrs.....	1	6	6	Scrap Iron.....	2	4	15	African M. E.....	...	6	7
Lead Pipe.....	1	1	1	Scroll Sawing.....	2	2	2	Methodist.....	6	10	10
Leather Belting and	...	...	...	Sculptors.....	1	2	3	Presbyterian...	36	24	26
Hose.....	2	6	6	Seedsman.....	1	5	5	United Pres....	...	17	17
Leather Hides, Oils	...	...	...	Sewer Pipe.....	2	19	9	Reformed Pres...	...	4	4
and Tallow...	2	9	11	Sewing Machines...	6	12	17	Cumberland Pres...	...	1	1
Leather & Findings.	2	9	10	Sheet Iron Workers..	8	13	15	Reformed.....	...	7	7
Light Gray Iron	...	...	...	Shovel Mfrs.....	1	2	2	Jewish Synagogues	1	3	2
Castings.....	2	2	3	Show Cases.....	2	3	4	Welsh Churches...	1	3	3

TO THE PEOPLE OF PITTSBURGH, BUSINESS MEN OF PENNSYLVANIA AND THE GREAT WEST.

We present to our readers and business community herewith a brief historical review of the prominent business houses and manufacturing firms of the City of Pittsburgh. It will be interesting as an exhibit of the growth of the city for the past thirty years. The notices, as a group, embrace numbers of substantial and enterprising firms in every department of trade, including many specialties not to be obtained in any other market, and will be an assurance to those contemplating a visit for the purpose of purchasing supplies, that their every want can be more fully satisfied, on as favorable terms, than at any other point in the United States.

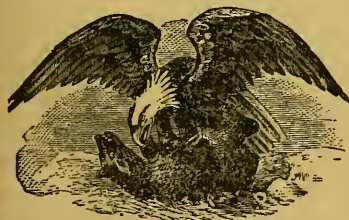
McCONWAY, TORLEY & CO.—*Eagle Malleable Iron Works,* *Cor. 25th & Liberty Sts.*

The supremacy of Pittsburgh as an iron manufacturing centre is never so clearly demonstrated as by a detailed inspection one after the other of those various firms and establishments that by the development of this great staple industry have secured for our municipality the well deserved title of Iron city. In making such a review the firm of McConway, Torley & Co., in the particular branch of the trade with which it is identified, will have to be accorded the first place, not only on account of the magnitude of its business but also with reference to the amplitude of its facilities and the quality of its products. The house was originally established in 1868 under the style and by Lewis & Co., who gave place to the present proprietors some years since, the latter having greatly increased the resources as well as the means and appliances for a more extensive manufacture of malleable iron castings of all descriptions, especially those of more than ordinary size, for which their facilities are particularly comprehensive and complete. To this end the plant which covers about half an acre, is supplied with one cupola and two air furnaces, four annealing furnaces, one powerful steam engine with 10-inch cylinder, 18-inch stroke, and other machinery of the best devices. From 50 to 60 operatives, most of whom are expert mechanics are employed by the firm, whose trade reaches from Maine to California, all over the United States and is rapidly increasing. Mr. Wm. McConway is a native of Ireland, where he was born in 1842; upon the removal of his parents to this country and city in 1849, he accompanied them, and when but twelve years of age began the acquisition of his present vocation. He belongs to the representative class of what may be called "self-made men." Mr. John J. Torley was born in New York, in 1830, and during the same year was brought to Pittsburgh with whose interests and vicissitudes he has been connected all his life, by the closest ties of public spirit and personal prosperity. These gentlemen are active partners in the house of McConway, Torley & Co., whose operations are conducted by these gentlemen, demonstrating in its success the wisdom of the policy upon which it is carried on, and achieving the esteem and confidence of the trade and the general public.

EBERHARDT & OBER,—*Lager Beer Brewers and Maltsters,* *Nos. 1 to 9 Try Hill Road, Allegheny.*

The business was first established by Mr. C. Eberhardt in 1852. The firm was changed to Eberhardt & Ober in 1870. The business was commenced on a very small capital and has increased very largely. Mr. Eberhardt was the third person who commenced the brewing of Lager Beer in Allegheny County. The buildings consist of one two-story frame structure, 40x44, malt house, 50x85, four stories high, with a capacity of 20,000 bushels; brewery and boiler-house, two-story brick structure 40x50. The power consists of two large boilers 20 feet long by 42 inches in diameter, and two engines of 20 and 15-horse power respectively. They have three large rock vaults with a capacity of 5,000 barrels, and are about erecting a large new ice house, 50x80, with a cellar underneath of 4,000 barrels capacity and a capacity of 2,000 tons of ice. Connected with their ponds and ice-houses in the country is a large steam elevator with a capacity of lifting 800 tons per day. They employ fifteen hands constantly and their pay-roll averages \$175 per week. The Lager Beer manufactured is not excelled by any in Western Pennsylvania. Having been permitted a complete inspection of the establishment, we have no hesitation in pronouncing it one of the very best and most complete in the country.

McKEESPORT IRON WORKS,—*W. D. Wood & Co., Office, 111 Water St.* *Manufacturers of Patent Planished Sheet Iron. Works, McKeesport, Pa.*



The McKeesport Iron Works are eligibly situated on the bank of the Monongahela River, eleven miles above Pittsburgh, covering an area of five acres, and affording employment to about 300 men. The senior partner of the firm, Mr. W. D. Wood, some thirty years ago began a series of experiments in the manufacture of sheet iron, the end sought after being to produce as durable and as finely finished an article as the "Russia Iron." Many others in this country and in Europe have made similar attempts, but he alone succeeded, and the McKeesport Iron Works is to-day the only mill outside of Russia manufacturing this class of iron. The firm (composed of W. D. Wood and his sons, Richard G. and Alan W. Wood,) commenced manufacturing an article in imitation of Russia Iron as early as 1851, at the works pictured above, (then just built). In the year 1870 they made a great improvement in their process, and the product was sold as American Russia Sheet Iron. In 1873 further improvements were made, including their Patent Planishing Process, and since then the product has been sold as Patent Planished Sheet Iron. This iron is equal in all respects to the Imported Russia. The principal railroad lines in the United States and Canada have adopted the Patent Planished Iron for covering their locomotives and for mounting the stoves in the passenger coaches. The Company also manufacture three other grades of sheet iron, known to the trade as the smooth surfaced common, charcoal, and Juniata. Patent Planished Sheet Iron is made exclusively of the best hammered charcoal bloom iron (made at the McKeesport Iron Works) and finished under planishing hammers weighing about three tons, striking 300 blows per minute, with an estimated force of 20 tons to each stroke. This planishing process imparts to it that beautiful gloss and dappled appearance of Russia Iron, and closes the pores so effectually that it will resist the action of the atmosphere fully as long. The capacity of the works is about 20,000 packs of Planished and about 5,000 tons of all kinds of sheet iron per annum.

FLEMING, AGNEW & CO.—Stamped & Japanned Ware,

61, 62, 63 & 64 Third Av.

This extensive establishment was founded in 1856 by Mr. John Fleming in a comparatively small way. He continued the business alone for two years, when Mr. Joseph Torrence was admitted as a partner, under the style of Fleming & Torrence. In 1865 new partners being admitted the firm became Fleming, Torrence & Co., and in 1868 it changed to its present style of Fleming, Agnew & Co., who have ever since carried on the business. The members of the firm as it now stands are Mr. John Fleming, Mr. Edward Agnew and Mr. John Hamilton, all of whom are thoroughly practical business men, through whose skill and experience this branch of industry has been largely developed and extended. They occupy as warerooms and office a substantial four-story brick structure 50x60 feet, and as a manufactory a similar four-story building directly opposite on the same street 60x75 feet in size, in which they employ seventy-five hands, with a pay-roll amounting to about \$2,500 per month. In this factory they have the best and most approved machinery to be found in any establishment of this kind in the United States, with one forty-horse power engine and boiler, the finest in the city.

The facilities enjoyed by this house for turning out superior articles rapidly are not surpassed. They carry an average stock of about \$60,000, and their annual sales amount to not less than \$200,000; their trade extending all over the Union. Among the various articles manufactured by this firm which have given them such a wide-spread reputation, we may mention Japanned cake boxes, candlesticks, canisters, cash boxes, coal hods and vases, cuspadores, tea caddies, toilet sets in great variety, bowls and pitchers, tin toys, miner lamps, and every article in that line that may be required. Stamped ware, including every variety of plates, cake pans, patty pan, pot and kettle covers and bottoms, dippers, milk pans, wash basins, etc. They are also extensive importers of and dealers in tinners' stock, tin plate metals, etc. This house stands prominent among the leading branches of industry and has contributed largely to the resources and reputation of the Iron city at home and abroad. Mr. Fleming and Mr. Hamilton are natives of Pennsylvania, and Mr. Agnew was born in the county Down, Ireland, but for many years has been a resident of this city.

LION BREWERY,—Corner of Vineal and Villa Sts.

This large and commodious establishment, the Lion Brewery, is where the finest and best quality of Lager Beer is manufactured. The brewery was first started in 1858 by Hechelmann & Co.—changed to the Lion Brewing Co. in 1874, in 1878 to Lutz & Walz, and to D. Lutz & Son in 1879. The entire establishment consists of five buildings, as follows: One two-story frame, 28x46, one three-story brick, 54x72, one two-story brick storehouse, 30x42, one two-story frame, 30x42, and an ice-house, 46x72, with a capacity of 1,200 tons. They turn out about 12,000 barrels of beer annually, and the business amounts to the comfortable sum of \$70,000 per year, with a stock on hand of \$18,000. They have eighteen hands constantly employed and their pay-roll amounts to \$220 per week. The power consists of one boiler, one engine of 26-horse power. The quality and excellence of their Lager Beer is not surpassed by any brewery in Western Pennsylvania and finds a ready and rapid sale in all parts of the country. Everything in and about the establishment is conducted in a neat and orderly manner.

D. LUTZ & SON,—Lager Beer Brewers, Nos. 1 to 11 Spring Garden Av., Allegheny.

The above firm is amongst the largest and most extensive brewers of Lager Beer in Western Pennsylvania. Their establishment, commonly known as the Allegheny Brewery, is located at Nos. 1, 3, 5, 7, 9 and 11 Spring Garden avenue, Allegheny. The business was first established by Lutz & Walz in 1853 on a very small capital, which has largely increased and now amounts to the large and magnificent sum of \$105,000 per annum, with a stock on hand of \$20,000. The firm was dissolved in March, 1879, by the death of Mr. Walz, and Mr. Anton Lutz was admitted into partnership. The brewery is one of the largest and most complete in Western Pennsylvania, and turns out about 15,000 barrels of beer annually. The buildings consist of one three-story brick, 50x44, one three-story brick, 32x140, one two-story brick, 50x108, and one two-story brick, 25x36 feet in size, one boiler and one engine of 32-horse power. The firm has a wide reputation for the quality and excellence of their beer and command a large and extensive trade. Mr. D. Lutz, the senior member of the firm, was born in Wurtemberg in 1822 and came to Allegheny in 1848. Anton Lutz was born in Pittsburgh in 1853.

D. RISHER & CO.—I. X. L. Tug Link, 62 Wood St.

The inventor or manufacturer of every useful and ingenious device or apparatus, especially such as either mitigates toil or increases its efficacy, is not only to be regarded with consideration by the community to which he belongs, but is in reality the means of affording a new outlet for labor and capital, perhaps otherwise unemployed. In devising the I. X. L. Tug Link, Messrs. Daniel Risher, Jr., and Daniel R. McClure, as D. Risher & Co., may properly be classed among those to whom these remarks apply as in the manufacture of their specialty they are not only supplying an appliance greatly needed, but contribute in no small degree to the comfort and ease of draft animals. The Tug Link of which the accompanying cut presents an admirable idea, is designed as an intermediate attachment between the single tree and trace on all road vehicles and agricultural implements, and its action not only tends to increase the durability of gear and harness by the neutralization of all shocks in starting or jars from sudden obstructions, but lessens the racket upon the horse by softening the strains upon the collar. These links are warranted not to get out of order more than an ordinary trace chain, and are constructed for simple and easy application with ring hook or open link; are sold at the very moderate price of \$1.75 per pair. Those ordering by mail should describe which of the above styles they desire. Endorsements of this effective little apparatus come from all parts of the country and are backed by the best houses in Pittsburgh.

Thomas C. Jenkins, the well known wholesale grocer, says: "They are the most complete invention yet introduced."

C. P. Markle & Sons, the celebrated paper manufacturers, write: "We consider your Tugs a greater benefit and saving than the springs of a buggy or wagon."

Mr. C. S. Sedgewick, the agent of the Adams Express Co., remarks, after describing the action of the link at some length: "They have my hearty endorsement as avoiding concussions and protecting the shoulders of the horses."

These with hundreds of others, after extended trial and experiment, concur in one uniform testimony to the value of the I. X. L. Tug Link. They are also beginning the manufacturing of a valuable improvement of a permanent spring attachment to the end of the whiffle tree for buggies and carriages, to which is a secure fastening for the traces; advantages attained by this article are a saving to traces and a great comfort and ease to the rider, giving much more regular motion to the vehicle. Both members of the house are natives of this city and were born respectively in 1842 and 1846. They are energetic, ingenious, practical and reliable gentlemen, well known in this community and richly entitled to the signal success that has and is attending their efforts.

VULCAN STEAM BOILER & SHEET IRON WORKS.

James McNeil & Bro., Railroad Street, between 29th & 30th Sts.

The general remarks elsewhere are particularly applicable to the firm of James McNeil & Bro., proprietors of the Vulcan Steam Boiler and Sheet Iron Works, and manufacturers of every description of steam boilers, portable and stationary, oil stills and tanks, whiskey stills, blast furnaces, silver furnaces, and all kinds of sheet iron work, and dealers in new and second-hand engines and machinery. This firm, which is one of the representative ones of the Iron city in this particular line, was founded in 1865, at first on a comparatively small scale and with moderate means, but their business has since increased to such an extent that they have been compelled to considerably enlarge their facilities, and the amount of capital now invested by this house is large. Their trade, which extends over a great portion of the United States and Territories, amounts to many thousands of dollars per annum and is steadily increasing. Their office and works are located on Railroad street, between 29th and 30th, and cover an area of 100x135 feet, supplied with the most complete and perfect machinery, tools and appliances, to be found in any similar establishment in the West. The business is systematically conducted under two general sub-divisions, viz: boiler department and machine department, in which thirty-five skilled and experienced workmen are constantly employed under the immediate supervision of the members of the firm, who are both thoroughly practical mechanics. The various articles manufactured by this well known firm, a portion of which we have enumerated above, are of the best material and most thorough workmanship. The second-hand machinery and engines offered by them are thoroughly overhauled, repaired and put in perfect order, before offering them for sale, and customers may depend upon finding them exactly as represented. Messrs. McNeil & Bro. have recently shipped a fine silver smelting furnace to Leadville, Colorado, on the order of one of the leading mining companies of that section, and are expecting further orders from that vicinity with the development of the immense resources of that argentiferous region. They constructed some beautiful flanges for iron firms in the city which were exhibited at the Centennial Exhibition in Philadelphia in 1876, and attracted much attention and very complimentary comments. While there may be other houses in the city with larger capital and more extensive works, we are safe in saying that there are none with more perfect and complete machinery and facilities and none more widely and favorably known for the superiority and reliability of their products. The members of the firm are conscientious and energetic business men, who have attained their present eminence in the business in which they are engaged by their own unaided efforts, industry, perseverance and probity. Mr. James McNeil, the senior member of the firm, is a native of Scotland, and was born in 1837, and has resided in the United States since he was thirteen years of age. He is a boiler maker by trade and worked at that business many years before embarking in his present business, acquiring a thorough practical knowledge of the trade in all its departments, and has had charge of some large manufacturing establishments in the East in that line of business. Mr. McNeil is highly respected as a citizen, and has occupied the position of school director for many years. Mr. Thomas McNeil, junior member of the firm, was born in Scotland in 1847. He is a practical machinist and has had a long experience in that branch of business. He has been a member of the school board and stands very high in the community in which he resides. He was elected to represent his ward in the City Councils, but removing from the district before the commencement of his term, resigned the position to which he had been called by a flattering majority. Both members of the firm are gentlemen of sterling integrity and worth and noted for their enterprise, business qualifications and unquestionable reliability in all matters pertaining to the social walks of life as well as in their commercial transactions.

THE ROCHESTER TUMBLER CO., OF PITTSBURGH, PA.

Office, Liberty and Ninth Sts.; Works, Rochester, Pa.

Organized by Pittsburgh capital and directed by Pittsburgh enterprise, the Rochester Tumbler Company and its operations are justly entitled to consideration in any work devoted to a detailed review of the industries of this city. From its organization, in 1872, till the present, the success that has attended the enterprise has been happily commensurate with the capacity and resolution of those to whose direction the business was entrusted. The works were located at Rochester, on the line of the P., Ft. W. and C. R. R., about 35 miles from the city, this spot being chosen not only for unrivalled facilities in shipping or receiving freights by railroad from all points, and the further advantages conferred in the same direction by the Ohio river, upon whose banks the plant is situated, but mainly on account of an inexhaustible flow of natural gas from two wells upon the premises, by means of which the expense for fuel is greatly modified, and certain portions of the work performed with more speed and perfection than attained by any previous methods. The works, when first constructed, were considered extensive, but the steadily increasing demand upon the resources of the Company for production required additions and enlargements of the manufactory from time to time, in order to keep pace with the growing trade, until, at this period of its history, the works are three times as large as at first constructed, with four times the productive capacity, and are, beyond question, the most extensive of the kind in the world. Every appliance or improved apparatus that modern ingenuity can devise or ample capital supply is to be found in this factory not only for the manufacture of glassware, but the construction of all the necessary pots, molds and models required in the business, the motive power for operating the machinery being furnished by two steam engines, having an aggregate of 35-horse power. Ten structures, of various dimensions, the largest being 200x200 feet, constitute the plant, which covers in all an area of 2½ acres—fire-proof buildings being used for the security of molds, models, &c.; a provision found only in this establishment. The work is subdivided into seven departments, which embrace not only the constructive portions of the manufacture, but the making of boxes, packing, shipping, mold and model-making, clerical, &c., employing in all 300 operatives and expert artisans, at an expense of \$9,000 per month, the working year occupying 50 weeks, the fires never having been put out since the commencement of the enterprise. The advantages derived from the use of natural gas (before referred to), which issues continually from two wells upon the premises, each 1200 feet deep, and originally sunk for oil (?), are very obvious, as cheapening production and making the best fuel known for annealing glass and preserving its color, luster and translucency, for which properties the goods manufactured by the Rochester Tumbler Company have acquired a reputation that is coextensive with the trade of the concern, which is not confined to the United States, but reaches Great Britain, Germany, Spain, Russia, South Africa, South America, Cuba, Japan, Australia, British America, and, in fact, almost every available market in the world. The magnitude of the enterprise cannot be readily shown without the art of the illustrator, but, from the fact that the works are capable of turning out 25,000 dozens of Tumblers per week, some idea may be gained of their extent. In the production of choice and beautiful designs in Tumblers and bar goods, this Company is unrivalled, continual improvements in this direction keeping it constantly in advance of the trade, and ensuring benefits to customers not to be duplicated by any cotemporaneous concern, entitling the Rochester Tumbler Company to the splendid success it has so richly deserved, and which has proved of so great an advantage in fostering the industrial thrift of this community.

JACOB YOUNG,—Groceries and Produce, No. 2525 Sarah St.

This establishment was started by Mr. Young in 1875, with a small capital, which he has since considerably increased. He keeps a full and general assortment of all kinds of goods generally found in a first-class Grocery and Provision Store, including Fruits and Vegetables, Choice Family Flour, Sugars, Coffees, Teas, Spices, Dried Meats, Canned Goods, &c. Mr. Young is always attentive and obliging to his customers. He occupies a commodious store-room, which he keeps filled with the freshest and best class of goods for home and family use. Mr. Young was born in this city in 1848. He is eminently worthy the liberal patronage he receives.

SPANG, CHALFANT & CO.—Etna Rolling Mills, Office, Sandusky St., Allegh'y.

No general description of the staple industries of Pittsburgh, however carefully compiled, or even reduced to a statistical basis, could possibly give one, unfamiliar with this great workshop of America, any adequate idea of its real magnitude, especially with relation to the manufacture of iron. By a review of each establishment engaged in this enterprise only, can a reasonable conception be conveyed of the ponderous interests involved by the trade in this city, or material be furnished for a proper appreciation of the development, resources and capacities of this community. To supply such information in detail is the object of this work, and in so doing the mills of Messrs. Spang, Chalfant & Co. are entitled to more than ordinary consideration. These works were established, originally, in 1828 by H. S. Spang, and are outranked in age by not more than one or two similar concerns in Western Pennsylvania or the entire West, and may be catalogued in the same class with reference to size and importance. When first constructed, the mills, though dependent on water power and employing not more than 50 operatives in all, were considered for that period remarkably extensive, and for nearly 10 years, under the original management, pursued a successful and useful career. In 1837 C. F. Spang, James McAuley and Joseph Long assumed control of the business under the style of Spang & Co., a title which remained unchanged until 1858, though the last named partner was associated with the enterprise but 12 months. The latter date marks the period when the existing firm, composed of Messrs. C. H. Spang, J. W. Chalfant, C. B. Heron and Geo. A. Chalfant, succeeded to the business, and from that time to the present the history of the enterprise is distinguished by a series of enlargements, improvements and a vast increase in production, as well as greater perfection in the methods employed and general results.

The scope of manufacture has also been widely extended. Originally confined to the product of Merchant Bar and Blooms, the output of the mills now consists of Bar Iron, Nails, Boiler Plate and Wrought Iron, lap welded Tubes for boilers and Steam Pipe. In this latter branch of manufacture the firm is the pioneer west of the Alleghenies, and was the first to engage in this department of the trade, obtaining from the outset a celebrity for work of this description that has been sedulously maintained and enhanced by the application of every modern appliance likely to increase the excellence of this product. The mills are located at Etna, a point about 5 miles above the city proper, on the North Side of the Allegheny River. In an article in the New York Times of March 27, 1877, upon the iron interests of Pittsburgh, considerable space is devoted to a description of these mills, from the fact that the fuel employed for all the operations, involved by the working of iron and machinery, consists of natural gas conveyed by a line of pipe 18 miles long from the oil regions in Butler County. In the adaptation of puddling and heating furnaces, and for the use of this gas, material changes were required, and obstacles to be overcome that taxed both the ingenuity and capital of the firm to no meagre extent. All difficulties, however, were finally removed, and, for the first time in the history of the iron industry, gas was used alone, without the adjunct of any other fuel, for the purpose of manufacturing iron successfully in every process to which it is subjected, requiring heat.

The plant at Etna consists of two rolling mills and two pipe mills, in which are employed about 450 operatives, whose earnings average from \$20,000 to \$25,000 per month, nine batteries of boilers and ten steam engines being necessary for the supply of motive power, much of the machinery being of the heaviest construction. Part of the apparatus consists of 22 puddling furnaces, 9 heating furnaces, 6 trains of rolls, 22 nail and spike machines and other appliances, some of which belong exclusively to the firm under letters patent, especially such as pertain to the rapid and perfect construction of sockets and couplings for wrought iron pipes, the capacity of the mills being not less than 12,000 tons per annum. It is hardly necessary to say that the house of Spang, Chalfant & Co. occupies a position among its cotemporaries devoid of blemish. The impetus given to the industries of this community by the capital and enterprise of the firm is not unrecognized, and the general consideration with which it is regarded is the natural outgrowth of a career, which for more than half a century has embodied the highest principles of commercial integrity and personal honor.

PEOPLES SAVINGS BANK OF PITTSBURGH,—81 Fourth Av.

The marked success attendant upon the career and operations of the Peoples Savings Bank of Pittsburgh is of such a pronounced and obvious character as to demand more than ordinary attention in making a careful review of the fiduciary institutions of this city. This bank was established in the Fall of 1866, its chief executive officer being the late lamented Henry Lloyd; William Rea, Esq., Vice President, Mr. S. F. von Bonnhorst occupying the positions of Secretary and Treasurer, trusts which he still holds. The charter authorized a capital stock of \$300,000, but the report of the Treasurer for the first year of its existence shows that while \$100,000 in stock had been subscribed, but \$34,920 had been actually paid in, the installment system for making payments being adopted, to encourage the investment of those of small means. From that time every annual report shows a marked increase in deposits, assets and general usefulness. In 1872 the capital was increased to the full extent of its charter limit, which now gives the bank the largest capital of any similar institution in the State. Upon the 30th of July, 1867, the total assets of the concern were \$102,338.75, and on the 30th of July, 1878, they had reached the prodigious aggregate of \$1,314,176.08, including a contingent or surplus fund of \$80,000, a showing that reflects the highest credit upon the skill and integrity that contributed to such a splendid result. The present officers of the bank are as follows:—Wm. Rea and Thomas Wightman, President, Vice President and also Trustees; Messrs. E. P. Jones, Atty at Law, Edward Gregg, of Logan, Gregg & Co., hardware; Hon. J. K. Moorhead, Geo. Wilson, Esq., Ex-mayor of the city; Hon. Edwin H. Stowe, present judge of Common Pleas Court; Jno. A. Caughey, of Caughey & Robinson, metal dealers; and David McK. Lloyd, 1st National Bank of Altoona, trustees; S. F. von Bonnhorst, Secretary and Treasurer, and N. G. von Bonnhorst, Teller and Book-keeper. Such being the management, the success of the enterprise was a foregone conclusion, and the high position it occupies among the financial concerns of this city, is a sufficient guarantee that its course has been directed by a wise and honorable policy.

KEYSTONE GAS LIGHT CO. (Limited),—Office, 44 Ninth St.

Since Pittsburgh became the commercial center of the oil-producing regions of Pennsylvania, many attempts have been made here and elsewhere, with a greater or less share of success, to rapidly convert the lighter products evolved in the process of distillation or refining into gas for illuminating purposes. In April, 1873, was incorporated the Keystone Gas Light Co. (limited), with a capital of \$6,500, having for its object the manufacture of a device that should greatly improve upon all previous methods of producing gas from oil or its products and providing a cheap, brilliant and safe illuminator, thoroughly applicable to every purpose for which coal gas is now used. The success of the enterprise so far has been commensurate with the undoubted advantages obtained by the process to which it claims exclusive title. The principle upon which the apparatus is constructed is simple but ingenious and consists of the "flame being utilized to manufacture the gas consumed by it. A tank containing naphtha is placed above a Belden burner and so connected with it that the contents in transit are re-distilled and issue from the burner carbureted hydrogen. The whole arrangement is economic and efficacious, the estimated cost of one burner being stated at about one mill an hour. Since its organization the stock has been increased to \$8,000, the officers being, H. S. A. Stewart, President, H. Campbell, Secretary and Treasurer. Managers—Henry Holdship, H. S. A. Stewart, H. Campbell, Lewis Irwin, and Harry C. Campbell, all of whom are intimately associated with the oil trade and recognized as practical and thoroughly responsible gentlemen in every respect. By addressing the company at the above address, those at a distance will be placed in possession of the details of the enterprise.

HUSSEY, HOWE & CO.—Mfrs. of Steel; Office & Works, 17th St. & Penn Av.

There have been certain epochs in the history of the American Iron trade so vital in import and of such overwhelming significance with regard to the future of all mechanic and most industrial arts, as to arrest at once the profound attention of all who trace the records of the development and elaboration of our material resources. The inauguration of the manufacture of crucible cast and open hearth steel, marks an era of this description, the full force of which, with reference to the growth and prosperity of Pittsburgh, will only be fully realized by the historian of a remote subsequent period, who will then be able to observe with unclouded vision the momentous consequences that hinge upon it. To the house of Hussey, Howe & Co. is justly ascribed the merit of first producing steel that should compete with the best imported English brands, and finally effecting an entire revolution of the trade, not only in this country, but in England. This result, however, was only achieved by years of unremitting endeavor, and the expenditure of nearly half a million of money before the efforts of the firm in this direction were crowned by a complete and signal success. The obstacles and discouragements to which the projectors of this enterprise were subjected required, in the highest degree, courage, tenacity of purpose and resolution to overcome. It was asserted on the part of the foreign manufacturers that the texture, quality and properties of American ore and iron were unsuited to the proper manufacture of steel, and that even the characteristics of our coke and coal were unfitted for this purpose. When these allegations had been entirely confuted by the actual product of steel that would compare favorably with any made in the world, it became difficult to induce American consumers to even give it a fair trial, so entirely prejudiced had they become by the arguments of British importers and producers. Every obstruction, however, finally disappeared before the unrivalled excellence of the steel, and the determination of its manufacturers.

The firm was originally established in 1858, the plant being located on the corner of 17th st. and Penn ave., covering an area of about one acre, and considered at that time prodigious in extent. The work of production was commenced in April, 1859, and was regarded as an undertaking that was certain to culminate in the same disaster that had overwhelmed every previous attempt, in a similar direction, made in this country up to that time. Proceeding, however, with the greatest circumspection, for nearly a year the efforts of the firm can hardly be said to have been more than a series of skillful and cautious experiments. Every grade of American iron was tested, and the results of each operation closely scrutinized. During the first three months but 10 tons of steel were produced, and after the lapse of 15 months the total product had reached but 280 tons. New methods were employed, and it was demonstrated that the English system of roasting the iron between layers of charcoal before the final crucible carbonization, could be dispensed with entirely, and the whole operation confined to the crucible alone. This was a discovery of paramount importance, and is properly attributed to this firm, as being the first to devise and carry it to a successful issue. The introduction of tool steel to the American trade had from the first a considerable effect upon the price of the imported article, and as it gradually became better known and was found to answer perfectly every requisite, the demand rapidly increased, necessitating enlarged facilities, which were promptly supplied. Additional works were erected, which now occupy an area of over four acres, and are equipped with the most perfect apparatus and machinery known to the trade. These appliances consist in part of eight trains of rolls, eight steam engines, with several batteries of boilers, twenty in all, nine steam hammers, five toll hammers, one hundred and two coke melting furnaces, four twenty-four pot Siemens furnaces for melting by gas, Siemens Martin open hearth furnace, besides steam shears, hydraulic presses, &c. The product consists in all descriptions of the finest quality of tool steel, and all kinds of agricultural and other steels. They have also lately introduced a very superior article of structural steel, which is used for building bridges and for armor and ship plates, out of which they have furnished in the last few months some 1,500 tons to build a bridge across the Missouri River at Glasgow, Mo., on the Chicago and Alton R. R. This is the first bridge built entirely of steel in the United States, and, perhaps, in the world. It was completed in April last, and has given the most complete satisfaction. As to the quality, Mr. Ames, of the Chicopee Ames Manufacturing Company of Massachusetts, testified before a congressional committee, that in the conversion to sabres of 200 tons of this material, a loss was sustained of less than two per cent. in defective metal, a result never equalled by the use of the best English steel. The members of this firm are gentlemen too well known in this city to require mention of a personal character. Commencing operations with a capacity of about 300 tons of steel per annum, the resources of the enterprise have been so enlarged as to be capable of producing at present from 10,000 to 12,000 tons yearly. As promotive of the general industrial welfare, the firm of Hussey, Howe & Co. perform a work of great magnitude in this direction, employing from 500 to 600 skilled workmen, at an average outlay of from \$28,000 to \$30,000 per month, and conducting a business that reaches almost every State of the Union, and increases with a steady and prosperous development. The most extensive enterprise of the kind upon this continent, its history is closely identified with the most important interests of Pittsburgh and the community at large. Since its inception the importation of English steel has fallen away to less than one-tenth of its former bulk, and there is every appearance that under existing conditions it may terminate altogether, and to all intents and purposes is now a dead letter. While enterprising and honorable, the business policy of the firm is liberal, and in this respect has few competitors in this city, no house having achieved so remarkable a success, and at the same time retained the high consideration of the trade, and the cordial esteem of the public, whose advantage has been fostered so materially by its operations.

PARK, SCOTT & CO.—Copper, Office, 122 Second Av.

As one of the only two houses in Pittsburgh engaged in the smelting and rolling of copper, the firm of Park, Scott & Co. is not properly to escape mention in this work. The history of this house and its predecessors carefully presented in detail, would involve so much of the commercial career and growth of Pittsburgh as to occupy more space than could be accorded, even if the necessary facts were at hand to supply the material. In brief, however, the original founder of the firm was Mr. James Park, Sr., who established himself in 1813 as a wholesale dealer in groceries and metals, a combination at that time by no means uncommon. For thirty years, during what may be designated in local history as the pack saddle, mule train and canal epoch, Mr. Park pursued his avocations with uniform success, laying the basis for a substantial fortune, and upon his demise in 1843 resigning the business to his sons D. E. and J. Park, Jr., who under the style of James Park & Sons continued the trade, confining themselves, however, exclusively to transactions in metals. In 1846 the house became Park, McCurdy & Co. and finally in 1877 assumed its present status and title. From the inception of the firm to this day, during the few changes that have taken place in its management and composition, it has never failed to occupy a prominent place among the institutions of the Iron city, or exert an active influence in the promotion of every measure that seemed likely to redound to the general advantage. The products of the firm consist of rolled lake superior copper, refined sheets, bars and ingots, or special shapes made to order. The plant is an extensive one, the machinery and appliances being of the best modern description, employing the labor of numerous skilled mechanics and ordinary workmen. In its business policy and characteristics the firm is liberal, enterprising and honorable, commanding the respect of the community and inspiring a degree of confidence that few houses are ever so fortunate as to acquire.

J. E. LIBBY,—Dentist, No. 4309 Butler St.

Dr. J. E. Libby, Dentist, has his Office and Dental Rooms at No. 4309 Butler St., where his skill and abilities are rapidly making success. The Doctor was born in Carroll county, Ohio. He learned his profession under the tuition of Dr. Templeton, of this city—a dentist of high abilities and culture. He afterwards attended the Pennsylvania College of Dental Surgery, in Philadelphia, completing his education and fully graduating him for the successful practice of Dentistry. He began the practice of his profession in this city, and afterwards, in 1877, removed to Lawrenceville.

WILLIAM HASLAGE,—*Jobber and Retailer in Groceries, Provisions, &c.* No. 18 Diamond Square.

A striking example of progress, and of what energy, knowledge of business and fair dealing may accomplish, is afforded by the history of this well-known house, which has become one of the business landmarks of the city. Mr. Haslage was born in Germany in 1827, and came to this city in 1845. After being engaged about two years as a clerk, he started business for himself on the South Side in an extremely small way, having a capital of but \$29. By attention to his business it gradually grew, and he removed to the Diamond. From the small beginning above mentioned, his business has grown to be the largest in the retail grocery line in the city, the stock usually being valued at about \$75,000, and sales amounting to \$200,000 yearly. The extensive building, erected for the purposes of Mr. Haslage's extensive business, is a hive of industry and activity. The store room has a front of 30 feet, and a depth of 150 feet. There are four floors, connected by elevators operated by steam power. The upper floors are used for storing goods, and also for roasting coffee and grinding and packing coffee, spices, etc. The carrying on of these operations in the building under the direct supervision of the proprietor, enables the house to guarantee the purity and good quality of all the packed goods they put upon the market, and has given to their coffees and spices a reputation second to none. The same care and attention have been given to every other department and have made it one of the most noteworthy of our flourishing business houses. Some idea of the extent of its business may be gained from the fact that it gives employment to about 25 persons in various capacities, and its pay-roll amounts to about \$1,000 per month. In addition to Groceries and Family Supplies in general, the first specialty of the house is in dealing in fine Teas, in which line a larger quantity is sold by Wm. Haslage, at retail, than by any two jobbers in the city together, at wholesale. The secret of the immense tea trade of this house, which reaches over 50,000 pounds yearly, lies in the advantages afforded customers in procuring here the same mixtures as can be obtained in any part of Europe, the same which has given London, Belfast and other European cities such a reputation as tea centers. These, with other fine groceries, are imported direct by Mr. Haslage, and he is the exclusive dealer in this city for these choice goods. The second specialty of the house is the importation of pure Brandies and Wines for medical purposes; also of domestic wines, principally of Mr. Haslage's own production. The entire business of this house is transacted strictly upon a cash basis, and no deviation is made from the established prices of goods. Its trade is extended in every direction from the city within a radius of 150 miles. Mr. Haslage's business qualifications have been called into requisition in several corporations. He has filled the office of Director in the Artisans Insurance Company since its organization, and for the past four years has been a Director in the German National Bank.

S. B. HEDGES & CO.—*Com. Mer. for Cattle, Hogs & Sheep. Central Stock Yards.*

Among the tens of thousands of producers this work will reach, showing the various industries and avocations of the Iron City, there will be a large number who are interested in the raising, buying and shipping of cattle, hogs and sheep, and as the advantages here presented will directly interest them, we append a brief notice of one of the most enterprising and worthy firms connected with the stock yards of this city. Messrs. S. B. Hedges & Co. are successors to the firm of Hedges & Taylor, who started in this business in 1867. Mr. Taylor retiring from the firm, Mr. S. B. Hedges continued the business in connection with others whose names are not essential to this sketch, and after some few changes, the present reliable company was established, consisting of Messrs. S. B. Hedges, the head and senior member of the Company, who was, in connection with Mr. Taylor, the original founder of this important business enterprise, and H. B. Pepper and Mr. F. Hedges, a brother of Mr. S. B. Hedges, each of whom is thoroughly conversant with the business in all its details, thus forming one of the most prompt and reliable firms operating in this line of business in Pittsburgh. They control a cash capital of \$40,000 and transact a very large and lucrative business, although, on account of discriminations in freight and general depression in business of all kinds, this branch has been largely reduced from former years, when the business was more than \$1,000,000 annually. This brief statement will convey to producers and dealers throughout the country the ample facilities enjoyed by this firm and insure entire confidence in their transactions. S. B. Hedges & Co. are Commission Merchants for the sale of Hogs, Cattle and Sheep, with their office located at the Central Stock Yards, where all communications may be addressed. They employ one book-keeper and a thoroughly competent salesman, besides giving their personal attention to the details of their extensive business. Mr. S. B. Hedges was born in Ohio in 1829. Mr. F. Hedges was also born in that State in 1834, and Mr. H. B. Pepper was born in Chester County, this State, in 1851. This firm enjoys a high and honorable reputation in the city and country.

HOLDSHIP & IRWIN,—*American Oil Works, Office, 49 Fifth Avenue.*

One of the first refineries erected in Pittsburgh after the production of petroleum in Pennsylvania, was the Woodville Oil Works, built by Henry and George Holdship in 1859-60. Purchasing the American Works (formerly called the "Forsyth Oil Works"), in 1870, the Woodville Works were removed to the same site and merged into one concern. At that time these works were the largest in capacity in the State, and even at this time are exceeded in these respects by but three or four refineries in this section. In 1864 Mr. George Holdship retired from the business and was succeeded by Mr. Lewis Irwin. The works are located near Sharpshurg Station, within the limits of the city, and cover an area of about seven acres. When in full operation the produce 5,000 barrels of refined oil per week, fifty men being required to conduct the various processes, whose earnings are about \$2,500 per month. There are some facts in regard to the career of this firm and its operations that single it out from all others and entitle it to more than usual consideration, and while we are debarred by the character of this work from any further comment on this subject, it must be proper to say that the evidences given by this firm of a high standard of personal and commercial honor and spotless integrity, are such as to place it in a position peculiarly its own. Both members of the firm are natives of Pittsburgh, widely known to the community at large and in no small degree aiding in various ways its development and prosperity.

ERNEST G. KREHAN,—*Interpreter for the Courts, Alderman, Conveyancer, etc.* 1101 Bingham St., South Side.

The career of Alderman Krehan has been one of such eminent usefulness as to entitle him to brief recognition in these pages. A native of Weimar, Germany, where he was born Oct. 30, 1835, at the early age of eighteen, impelled by the most laudable youthful aspirations, he emigrated to this country, and after residing at Buffalo, N. Y., for one year, came to Pittsburgh in 1854, and for a quarter of a century has identified himself with the best interests of the community. Soon after his arrival in this city he applied himself to the drug business, in which he shortly became an adept, commencing operations for himself in 1860, quitting the same in 1866, since which time he has continued, in spite of other pressing demands upon his time, to occupy a high position in the profession. Under the administration of Presidents Lincoln and Johnson he was appointed Postmaster of Birmingham, which was not at that time annexed to Pittsburgh by consolidation, and in 1867 was created official Interpreter of the Allegheny County Courts by Gov. Geary, whose action was confirmed by the Senate of Pennsylvania, and in 1876 he was reappointed by Gov. Hartman for a term of three years. As Alderman of the 29th ward, Squire Krehan was elected in 1870, a choice which proved so satisfactory to his constituents that he was again elected to the same office in 1875, his term in this capacity not expiring till March, 1880. Expert as a linguist, clement, but just, as an alderman, and reliable in his profession and all relations with others, Squire Krehan deserves the esteem which he has achieved and the friendship which his uniform course has inspired.

DUQUESNE BOILER WORKS,—James Thorn & Co., Duquesne Way & 2d St.

Familiar with the constitution, manufacture and capabilities of iron in all its forms, from the crude ore to the finished plate, the skilled mechanics and enterprising manufacturers of Pittsburgh find no obstacles in the construction of any thing of which iron is the material or forms a component part, from the smallest tack requiring thousands to make a pound, to an ocean steamship of the most magnificent proportions. In every branch of industry pertaining to the various specialties of iron-working are representative houses whose names have become familiar, not only throughout our own country, but in every quarter of the globe. Few manufacturing establishments, if any, have contributed more largely to spread the fame and reputation of Pittsburgh, as the great industrial center of the western hemisphere, than that of Messrs. James Thorn & Co., proprietors of the Duquesne Boiler Works and manufacturers of Steam Boilers, Oil Stills and Tanks, Agitators, Salt Fans, and every description of Wrought and Sheet-Iron Work, including Steel and Iron Hulls for vessels, steamboats, barges, &c. This business was established by Thos. McCollister & Eschmann, in 1840, and others, and, after various changes in style of firm and management, came into possession of the present proprietors in 1861. The premises occupied by this firm are on the corner of Second St. and Duquesne Way, covering an area of 150x200 feet, with spacious and conveniently-arranged buildings for the prosecution of their business in all its departments, and the most perfect and complete machinery and tools to be found in any similar establishment in the country, including a steam engine of 25 horse-power. Thirty-five skilled hands are constantly employed at these extensive works, with a monthly pay-roll aggregating about \$1,800. Their trade is principally derived from the two cities, the oil regions and the steamboat interests of our own and western rivers, iron mills, etc., although they are rapidly acquiring not only a national but a world-wide celebrity. During the year 1873 this firm constructed for an English company a steel steamship hull, for use in South American waters, which not only gave the most perfect satisfaction, but surpassed their utmost expectations, drawing only 22 inches of water, whereas those of English build which had previously been constructed for the same purpose were found to be utterly impracticable and unserviceable in the shallow waters of the Magdalene river, drawing more than four feet of water. This hull was manufactured and completed entirely in Pittsburgh, and then taken apart and shipped in sections by rail to New York, thence to South America, where it was put together again by men sent from this establishment for that purpose. The wood work for this steamship was also built in this city by Messrs. Slack & Sholes, a description of which will be found in this work under the article devoted to that firm. Messrs. Thorn & Co. are now negotiating for the construction of two other large hulls for New York parties, and are making arrangements to considerably enlarge their works and increase their facilities. Both members of this firm are thorough, practical mechanics. Mr. James Thorn is a blacksmith, and during the war of the rebellion was in the employ of the United States government, in the construction of government gunboats. He is an energetic, enterprising business man, and thoroughly conversant with all the details of the business in which he is engaged. Mr. James Reese, the other partner, is a practical machinist, and, in connection with his interest in this business, carries on extensive machine and engine works at the corner of Fourth St. and Duquesne Way. It is to the enterprise, ability and skill of such gentlemen as these that our city is largely indebted for the proud position she occupies to-day among the manufacturing cities of the world.

MACKEOWN, THOMPSON & CO.—Oldest Wholesale Drug House in the city. 195 Liberty Street.

As the Oldest Wholesale Drug House in the city, conspicuous for the general extent of its business and resources, the firm of McKeown, Thompson & Co. is entitled to most favorable consideration in a work designed to exhibit in detail the Industries of Pittsburgh. Mr. John Hanlon, the pioneer druggist of this city, was the founder of this house in 1825, with very limited capital and in an extremely small way. With the natural growth of the city the trade grew in proportion until it became a marked feature, and passing into the hands of the present firm many years ago, was considerably augmented and a new impetus given to the concern. The premises of the house are most eligible, situated at 195 Liberty street, and consist of one large four-story brick edifice with finished basement, 22x110 feet, containing a carefully selected assortment to the value of from \$40,000 to \$50,000, forming the basis for an annual trade of \$120,000 to \$150,000, exclusively at wholesale. In connection with the drug business, embracing all and singular complete supplies in this branch, this house is recognized as general headquarters for Paints of all kinds, Spirits of Turpentine, Resin and Pine Tar, Spermin, Whale, Fish, Lard, Engine and Lubricating Oils, etc. In these articles they deal very largely, sales of Pure Lead alone amounting to one hundred tons per annum. Twelve hands are employed in the various departments of the trade, which has gradually extended over Western Pennsylvania, Eastern Ohio and West Virginia, and is increasing yearly under the liberal and enterprising policy of the firm. All the members of this firm are natives of this city, to the prosperity of which their thrift and enterprise has largely contributed. In those particular lines in which Messrs. MacKeown, Thompson & Co. are engaged, they are heartily commended as being reliable and agreeable people to deal with, having facilities for the supply of the trade which cannot be duplicated in Pittsburgh and which are certain to afford buyers every advantage in price, quality and circumstance.

ARTISANS DEPOSIT BANK,—Corner of Third Av. and Wood St.

The financial institutions of Pittsburgh, though numerous, are yet, as a rule, characterized by a fair and hopeful degree of prosperity and a general management safe and conservative, though enterprising. These remarks are as applicable to the Artisans Deposit Bank as any similar concern in this city, of which it forms part of the fiduciary system. The bank was organized in 1870 and incorporated under the State law, with a paid-up capital of \$180,000, with the privilege of increasing it to half a million. Conducting a legitimate banking business in loans, discounts, deposits, collections and exchange, some idea of the ability of its management may be derived from the fact that since its establishment it has paid from its earnings as dividends to the stockholders about \$100,000. Such success is of course owing to the fidelity with which the officers have administered their trusts, and without any fortuitous conditions of finance or trade during the period of the existence of the institution. From its inception to the present time Messrs. Wm. H. Smith and J. F. Stark have respectively occupied the positions of president and cashier, the former being also president of the Artisans Insurance Co. The directors are, besides the chief executive, Messrs. John Dunlap, manufacturer of tinware; J. P. Barr, editor and proprietor of the Daily and Weekly Post; James McGinnis; W. S. Jackson, Idlewood Hotel; J. T. Colvin, of Colvin, Atwell & Co., wholesale grocers; F. M. Hutchinson, secretary and treasurer of the Port Wayne Railway Co.; John J. Pettit, of J. J. Pettit & Co., produce, and L. Glesenkamp, of L. Glesenkamp & Co., carriage manufacturers. The cashier's staff is now composed of James P. Gelston, teller and book-keeper, and Wm. F. Miller, Messenger. The success of the Artisans Deposit Bank under such control is equal to that of any institution started under similar conditions and auspices, and the consideration in which it is held speaks strongly in its favor as a solid and popular institution.

A. G. CRONER,—Tin, Copper and Sheet-Iron Ware, St. Clair St., Mt. Washington.

This business, purchased from his predecessor, Mr. Reigle, has been carried on by Mr. Croner since the Spring of 1878, having then started with a good capital, which he has since increased. He has an extended custom and trade for many miles around, carrying a fair stock on hand of Tin, Copper and Sheet-Iron Ware, variety of Stoves, Hardware and House-furnishing Goods. Stoves exchanged and repaired, Tin-Roofing and Job Work of all kinds promptly attended to. All work warranted to give satisfaction. Mr. Croner was born in Washington county, Pennsylvania, in 1851, and began business here in this city in 1878, and is well deserving of public patronage.

TRADESMENS NATIONAL BANK,—*Cor. Wood St. & Fourth Av.*

The Tradesmens National Bank is another of the financial institutions of Pittsburgh, the wisdom of whose management has been endorsed by success, as well as by the high position it enjoys in the esteem and consideration of the community. This bank was organized upon its present basis January 1st, 1865, with a capital of \$400,000, and was shortly afterwards appointed as a United States depository for this district. The officers are prominent in the various industries of this city and are as follows:—A. Bradley, Esq., President, and senior member of the firm of A. Bradley & Co., stove founders, has occupied this position since the establishment of the bank. Wm. Vankirk, Esq., Vice President, associated with the same firm, and Mr. Cyrus Clarke, Jr., for twelve years performing the duties of cashier with recognized ability. The directors besides the President and Vice President, are Messrs. John Dunlap, Jas. M. Schoonmaker, Jno. F. Dravo, W. Dewes Wood, Oliver P. Scaife, Sullivan Johnson and John C. Risher; gentlemen so well known as successful merchants, manufacturers and producers, as to require no personal mention. The staff of the cashier is composed of Messrs. Ross W. Drum, teller; E. L. Goff, ass't. teller; A. J. Lawrence, General bookkeeper; J. B. Van Wagener, individual bookkeeper; R. M. Davis, discount and loan clerk; J. K. Crawford, corresponding clerk, and Samuel Story, messenger. That the operations of the bank have been ably conducted requires no other demonstration than that up to January 1, 1879, \$523,000 had been paid the stockholders as dividends and a surplus accumulated of over \$100,000. Very few banks in this city have done better, or more deservedly enjoy the confidence and respect of the public.

ARMSTRONG, BRO. & CO.—*Mfrs. of Corks and Bungs, 24th & Railroad Sts.*

The manufacture of Corks and Bungs is extensively carried on at the corner of Twentyfourth and Railroad streets, by the firm of Armstrong, Bro. & Co. The business was originated in this city, in 1854, by Mr. Harry Overington, on a comparatively small scale, and with moderate means, on Smithfield street. He was succeeded by the firm of John D. Glass & Co., and they in turn by Armstrong, Bro. & Co., who considerably increased the facilities and enlarged the business. In 1862 they removed to Third street, now Third avenue, where they re-modeled and enlarged the spacious three-story brick structure, which had been previously occupied by Lewis, Oliver & Phillips. They remained in this location for six years, when they were compelled to seek more commodious quarters, and removed to the large double warehouse, Nos. 44 and 46 First avenue. In 1878 the entire establishment was destroyed by fire, and the firm immediately proceeded to erect their present commodious and spacious manufactory, which is four stories in height, and built in the form of an "L," with a frontage of two hundred feet on Twentyfourth street, and one hundred and twenty feet on Railroad street, and supplied with the most perfect and complete machinery. The trade of this house extends over every portion of the United States, from the Atlantic Ocean to the Pacific slope. They employ on an average about one hundred and seventy-five hands, with a weekly pay-roll aggregating about \$1,200. They import the raw material directly from the cork forests of sunny Spain, and manufacture every description of Corks, from the most diminutive sizes to the largest known to the trade, and cut cork to any desired shape and style, such as life preservers, &c. Shavings from the factory are largely used for the manufacture of beds and mattresses, and are highly commended for that purpose by all who have them. In addition to the manufacture of Corks this firm has a large factory in Warsaw, Indiana, where they produce an immense number of compressed wooden bungs for barrels, which meet with a ready sale for a variety of purposes.

Mr. T. M. Armstrong is a native of New York City, and was born in 1836. He has resided in Pittsburgh since he was ten years of age, and since 1860 has been identified with the cork business, having been a member of the firm of Jno. D. Glass & Co. Mr. A. J. Armstrong was born in Allegheny City in 1847, and has been a life-long resident of this county. Mr. Wm. L. Standish is a native of West Virginia and has resided in Pittsburgh since 1864, and connected with this establishment during the entire period. Mr. R. D. Armstrong, who was for many years the financial manager of the house, was born in New York city in 1837, and came to this city at the age of three years and entered the firm at its organization. He was a genial, affable and highly respected gentleman in all the walks of life and universally esteemed and respected; he died in October 1878. At the time of his decease he was a member of the board of directors of the United States bank and had for many years been regarded as one of the most noble, conscientious and honorable individuals in the ranks of Pittsburgh's representative men. The surviving members of the firm are enterprising, able and energetic gentlemen of the highest standing and of unsullied reputation.

J. W. McFARLAND & CO.—*Carpets, No. 101 Fifth Av.*

Among the several firms in Pittsburgh engaged in the Carpet trade, perhaps none will bear a favorable comparison, with reference to extent, general appointments and magnitude, as well as variety of stock, with the enterprise of Messrs. J. W. McFarland & Co. This widely-known house was established in 1863, under the style of McFarland, Collins & Co., the senior partner—J. W. McFarland—being, in reality, the sole manager and active worker of the concern, and in 1877 the title of the firm became as at present, the Company being nominal except in so far as representing some interests vested in the business by members of the family of Mr. McFarland. The premises occupied by the house are situated most eligibly on Fifth Av., the main thoroughfare of the city, next door to the Post Office—the building, an ornate, wire-front structure, being one of the handsomest in Pittsburgh. Three floors of this edifice, each being 30x120 feet in dimensions, are engrossed by the firm and fitted up for the rapid and convenient transaction of business, in a manner worthy of the character and standing of the concern. Two patent elevators conduce to the pleasant avoidance of stairways, while the general furnishing is all that could be desired—the shelving on one floor alone, which is sustained by iron rods and braces from the ceilings, costing over \$1000. The first floor is occupied as the main salesroom, and is not only admirably lighted, but is laid with South Carolina yellow pine of unusually fine quality, and has an altitude of 20 feet, which, with other advantages in the way of decoration, &c., makes it, perhaps, the most elegant and spacious business apartment in the city. The second and third floors are used as store, stock and work-rooms in the upholstery department, which branch of the trade is carried on very extensively, the whole force of employees being five salesmen, two clerks, two porters, one driver, four upholsterers, six sewing girls—making a staff of 19 assistants in all; besides which, a team of horses and two wagons are required for the delivery of goods through the cities and to steamboats, railways, &c. The stock embraces Carpets of every grade, make and quality, imported and domestic, Window Shades and Fixtures in great variety, Curtains, Cornices, Floor and Table Cloths, Mattings, Rugs, Druggets, Oil Cloths and every species of floor covering, having an average value of from \$15,000 to \$20,000—the annual business amounting to \$40,000 and upwards. Mr. McFarland is a native of Franklin county, Pennsylvania, born in 1833. He became a resident of this city when 20 years of age, and, for more than a quarter of a century, has exerted a marked influence in his vocation, to the benefit of the general public, by whom he is justly esteemed as the oldest as well as the most widely experienced representative of the business in Pittsburgh. Mr. McFarland is a remarkably rapid and decisive thinker and a pleasingly fluent speaker. In his thorough and detailed knowledge of everything pertaining to or contingent upon his occupation he has few concepers; nor are his attainments limited to the channels of trade and commerce. Prompt, reliable, liberal, with an activity and industry that knows no pause, he has made his house a favorite one for those who have once appreciated the advantages to be derived there in prices; and, more than all, that considerate and honest advice which no one is better able or more willing to offer than Mr. McFarland. With these facilities, natural and acquired, it is no matter of surprise that the trade of this firm has embraced not only western Pennsylvania, but a large part of West Virginia and Ohio—orders having been received even from Iowa and Missouri, as the result of a business policy based upon principles that none may successfully ignore.

WILSON, WALKER & CO.—Union Forge and Iron Mill, 29th & Railroad Sts.

It is only by a careful review in detail of the industries of Pittsburgh that any adequate idea can be gained in regard to the real magnitude of those interests which are of such vital importance, not only to this community, but the American public at large. It being the main object of this work to present such facts, brief descriptions of the principal manufacturing enterprises are not only proper but essential, and in this connection the firm of Messrs. Wilson, Walker & Co. is entitled to more than passing notice. The Union Forge and Iron Mill was established in 1861, by Messrs. Klonan & Phipps, who were succeeded by Messrs. Carnegie, Klonan & Co. in 1866, and carried on the business until 1873, when the present firm was organized, being composed individually of John T. & James R. Wilson and John Walker as general partners, and Andrew Carnegie, of New York, as special partner. Under this management the scope of the mill was greatly increased and its facilities in all departments much enlarged. The main mill now covers an area of 90x300 feet, the blacksmith shop 72x250 feet and the forge and machine shop 72x200 feet, which, together with other buildings of smaller dimensions, occupy an area of about two acres. To operate the powerful and in many instances intricate machinery with which the works are thoroughly equipped, requires ten steam engines of various powers and ten boilers, the apparatus consisting in part of fifteen single puddling furnaces, six heating furnaces, nine steam hammers, five trains of rolls, one 18, one 15 and one 10 inch and two universal plate trains. With these and other appliances and facilities, the products of the mill are of the finest grades known, and consist of all descriptions of railroad car and locomotive forgings, bar iron, universal mill plates, bridge irons and special shapes of all kinds to order, shafting, splice bars, &c., and for the manufacture of these specialties the works are said to be the best furnished and most extensive in the United States. Besides the ordinary machinery usually found in such establishments and generally known to the trade, Mr. J. T. Wilson, who is a practical iron worker and mechanic, has devised and invented numerous pieces of mechanism for special purposes, labor and time saving, that are only to be found in this mill and will greatly add to the general efficacy of the work, the total productive capacity being about 12,000 tons per annum. The operatives employed at these works range from 175 to 350 and average about 350, which represents the maintenance of two thousand individuals, and conveys an idea of the usefulness of the firm in the promotion of the industrial welfare of the community. The plant being located upon the line of the Allegheny Valley R. R. with connecting sidings, possesses certain advantages in making direct shipments upon all roads centering in Pittsburgh not easily duplicated, and the introduction of the wires of the Western Union Telegraph Co. into the office adds still further to the facility for transacting a business which ranges over the entire United States and Canadian Provinces. As a firm it is not going too far to say that the house of Wilson, Walker & Co. has achieved a position and success acquired by few of its contemporaries, and enjoys the high esteem of the trade and the consideration of the general public, which derives such marked advantages from its enterprise and capacity.

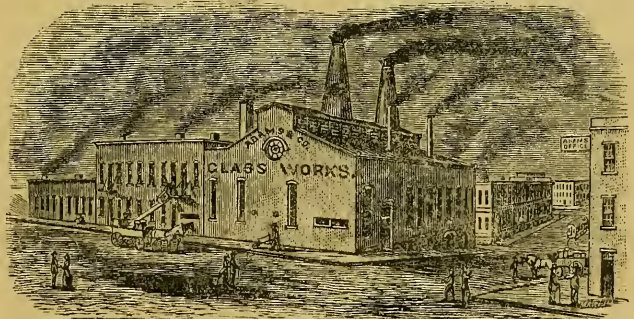
PETER SOFFEL,—Boots and Shoes, Sycamore St., 32d Ward.

Among the industries of the City of Pittsburgh to which this work is devoted, there is scarcely any one class outside of the great Iron and Glass trade which deserves more liberal notice than that of the general Boot and Shoe trade. So great is the competition, that greater energy and enterprise are essential to success, and in this connection we desire to call attention to the excellent store and stock of Mr. Peter Soffel, located on Sycamore street in the 32d Ward. This business was started by the present proprietor in 1861, with comparatively small capital, but which has been very materially increased by the liberal patronage he has constantly received since that time. He carries a stock ranging from \$2,500 to \$4,000, embracing the most desirable and reliable goods for Men, Women, Boys, Misses or Children, and his prices are lower than his competitors. The length of time Mr. Soffel has been in business has enabled him to establish an enviable reputation for fair and square dealing, and given him great popularity in his ward. He was twice a member of the Borough Council, also School Director previous to this part of the city being incorporated in the city limits. Mr. Soffel was born in Germany in 1838, and came to this city in 1854, where he enjoys a flourishing trade and the esteem and confidence of a large circle of friends and patrons.

ADAMS & CO.—Table Glassware; Office & Works, 10th & Williams Sts., South Side.

In making a detailed review of the glass trade, as having a powerful influence upon the industries of Pittsburgh, the well-known house of Adams & Co., manufacturers of Crystal Glassware, should not be overlooked. This firm was originated in 1851 by and under the style of Adams, Macklin & Co., who commenced operations under many disadvantages and with a capital that would now be considered altogether inadequate. The business prospered, however, under a shrewd and practical management, and became an established success after several years of unremitting exertion on the part of its projectors. In 1861 a change in the firm took place, the title becoming as at present, the members of the house now being John Adams, Esq., Geo. F. Easton, Godfried Miller, A. A. Adams, Jas. Dalzell, and W. Adams—all of whom take an active interest in the work. The plant is located, as above, in Williams St., South Side, and has been greatly enlarged and improved since the succession of the existing firm. It consists of five large buildings, covering in all an area of about two acres, and containing two factories and two furnaces, having, in all, 23 pots, one engine and boiler, besides all the necessary machinery and appliances for conducting operations upon the largest scale.

Here are employed about 200 expert artisans, to pay whom a weekly disbursement is entailed upon the firm of \$2,000, the total annual business transacted amounting to between \$175,000 and \$200,000, and extending throughout the United States, Canada, Cuba and South America. The products of the firm are widely known for superior excellence, in finish and design; they consist mainly of Table Glassware, Lamp Chimneys, Lamps and Jelly Tumblers, greatly improved, upon which the firm holds several patents, the right to manufacture being exclusively confined to this house. Of the several members of the firm, all are natives of Allegheny county except Mr. Miller, who was born in Germany. Mr. John Adams, the senior partner, is closely identified with the industrial development of this city, being connected with many institutions prominent for their usefulness. As a late member of the city councils, his influence was always directed to the support of those measures which seemed best calculated to promote the general good; and, as a director of the Iron and Glass Dollar Savings Bank, street railway companies, and the Flint Glass Association, Mr. Adams has done no little to foster the resources of this city. The firm, of which he is the esteemed head, occupies a high position in the trade and commands the respect of the community. Its business operations are based upon a policy of honorable as well as liberal dealing, and can offer advantages to the trade that make it a most desirable house with which to establish relations.



PITTSBURGH BANK FOR SAVINGS,—No. 61 Fourth Av.

This favorite financial institution was incorporated under a special charter by the Legislature of Pennsylvania, April 11, 1862, as the "Dime Savings Institution of Pittsburgh," a title which gave place, however, subsequently to that at present employed, which conveys very clearly the main object of its organization. That the design of its founders has been realized to a marked degree, may be readily inferred from some figures taken from the Thirty-first Semi-annual Attested Report, which shows the available assets of the concern to be \$675,332.64, and a contingent or surplus fund of \$91,745.77—or \$16,745.77 more than the capital stock. Such results are of course almost entirely due to the conservative and conscientious manner in which the affairs of the bank have been managed, and necessarily redounded to the credit of those to whom the business has been entrusted. Among these it may be natural to expect to find some of the most prominent names in the city—an anticipation by no means defeated, as proved by the following list of officers and directors:—Geo. A. Berry, Esq., President—also President of Citizens' National Bank, Director of Monongahela Insurance Co., and connected with numerous other institutions; John Scott, Esq., and James Park, Jr., Vice Presidents, the former being President of the Allegheny Valley R. R., also President of the P. V. & C. R. R., Director of the Merchants' and Manufacturers' National Bank, and largely interested in the manufacturing interests of the community. The latter is of the firm of Park Bro's. & Co., proprietors of the Black Diamond Steel Works and intimately identified with the development of the natural resources of Pittsburgh; Mr. Chas. G. Milnor, Treasurer and Secretary, well known for an extended banking experience prior to his connection with this institution; Mr. David W. Jones, Teller and Book-keeper, also an expert in his department of the business. The Board of Managers, while including the president and vice-presidents heretofore named, consists also of the following gentlemen:—A. Bradley, Esq., President of the Tradesmen's National Bank and senior partner in the house of A. Bradley & Co., stove founders; R. C. Schmirz, Esq., President of the Allemania Insurance Co. and largely engaged in the glass trade. Hon. James L. Graham, influentially allied to numerous important organizations; Frank Rahm, Esq., President of the Woodruff Sleeping Car Co. and L. M. Plumer, Esq., Attorney at Law, Solicitor. Under the management and direction of such officers and managers, the signal success that has attended the career of the Pittsburgh Bank for Savings becomes readily accounted for, and a future of equal prosperity and usefulness seems as certainly assured.

JULIUS VOETTER,—New York Hog Trade Stock Yards, East End.

About two-thirds of the stock disposed of are sold in the New York market and the other third here, in Philadelphia and other points. In handling hogs for the New York trade, Mr. Julius Voetter does a yearly business of over half a million dollars. He commenced here in 1856 in a small way, with a capital of only \$200 or \$300, but under his judicious management it has increased until it now reaches, if it does not exceed \$15,000. He occupies an office at the stock yards and may also be communicated with at J. D. Huffman's butcher shop. He employs ten men, with a monthly pay-roll of \$800. His business is conducted under two separate departments, in the first of which he has associated with him Mr. J. G. Struble in the butchering department and Mr. J. D. Huffman. At this place on Penn avenue they use one engine boiler, two meat choppers and hard tanks. Mr. Voetter is a native of Germany, born at Wurttemberg Nov. 15, 1836. He came to Pittsburgh in 1856, and to the stock yards in 1864. He commenced business in 1854 at Salem, Ohio, and has been actively engaged in the stock trade ever since.

JACOB RUCH & BRO.—Carriage Manufacturers, 304 & 306 5th Av.

The gentlemen composing this firm are both natives of this city and were born on the very street where now stands the factory they operate. Established in 1876, on a capital of about \$4,000, which has since been augmented, it may now safely be placed at \$12,000. They carry a stock of \$9,000 and transact an annual business of from \$10,000 to \$12,000. Their factory is two stories high and 50x100 feet in size, and is divided into four departments, viz.: Wood-working, Blacksmithing, Trimming and Painting. Ten hands are employed, with a pay-roll amounting to \$110 per week. The work turned out embraces Barouches, Doctors Phaetons, Jaggers and Buck Wagons, etc. This concern is noted for the excellence of their work, employing none but the best mechanics and using only the best material. Coach work made to order is one of the specialties of this house. The success attending this establishment is evidence of its appreciation by the citizens. Jacob Ruch was born in 1840 and Fred. Ruch in 1838.

JOHN MUSSLER,—Meat Market, 127 Beaver Av., Allegheny.

This is one of the old established and successful business houses of the city, having been established more than forty years ago by the present proprietor. Mr. Mussler is a native of Germany, but he has resided in Allegheny since 1837, and been engaged in his present line of business since 1839. His extensive establishment is located at No. 127 Beaver avenue, and consists of a three-story brick building 20x55, occupied as a meat market with three smaller buildings in the rear. He is assisted by his son and does his own slaughtering; customers may be assured of procuring at all times the choicest and freshest meats in the market. Beef, pork, mutton, lamb, veal, &c., replenished daily and all kinds of pickled and smoked meats, sausages, &c.; his annual sales will reach at least \$15,000. Mr. Mussler's establishment is desirably located and his surroundings are such that he enjoys the patronage of many of the principal families of the city.

JAS. W. DRAPE,—Auctioneer, Real Estate and Insurance, 112 Federal St., Allegheny.

This well-known knight of the hammer and master of "going going, gone!" began business in 1872, and has conducted it with marked success. The business transacted ranges from \$150,000 to \$200,000 yearly, with gradual increase. The business of such a man is multifarious, special attention being given to buying and selling Stocks, and negotiating Mortgages, and acts as Notary Public, House Agent, Appraiser, Broker, etc. Mr. Drape employs three hands. His business is chiefly in Allegheny County, but extends on occasions into various parts of Ohio. He was born in Scotland in 1837 and came to this city in 1866. He began in Pittsburgh in 1868 a general jobbing business in nails, hardware, etc., and in this line did a very large business. He is enterprising and has a great personal and professional popularity.

W. W. HECHELMAN, M. D.—65 Madison Av., Cor. Washington St., Allegheny.

This well-known Physician and Surgeon commenced his professional career in Allegheny City in 1871. He graduated at Jefferson Medical College, Philadelphia, in 1869, and also resided as a medical student for some time at Munich, Germany, and graduated in 1870 at that place. In the Franco-Prussian War he was engaged as surgeon and profited greatly in a professional way by the opportunities afforded him. Dr. Hechelman gives special attention to diseases of the eye and ear. His treatment of such cases is said to be eminently successful. For the treatment of these delicate organs he has the latest and most improved instruments. The doctor has a large and growing practice in Allegheny City, Pittsburgh, Birmingham and throughout the county generally. He was born in Germany in 1848, and came to this city in 1860, and is an honor to the profession.

E. & G. H. ZACHARIAS,—*Cigar Manufacturers, 723 Penn Av.*

Among the prominent houses engaged in the manufacture of cigars in this city, we would make mention of E. & G. H. Zacharias, proprietors of factory No. 118, located at No. 723 Penn avenue, and also proprietors of the cigar store on Smithfield street in the Central Hotel building. This house was established in 1862 by the present proprietors, at first in a small way as a retail cigar store, but their business rapidly increased and they engaged in the manufacture of cigars, which they now carry on extensively, employing a number of hands, making both hand and mould work, ranging in price from \$15 to \$70 per thousand. The celebrated "Champion" brand is their specialty, it is a five cent cigar which meets with popular favor. Their factory on Penn avenue is a three-story brick structure 14x60 feet in size. Their Smithfield street establishment under the Central Hotel is filled with a choice stock of foreign and domestic cigars and manufactured tobacco of the finest brands. Their business at both places is both wholesale and retail, carrying an average stock of about 60,000 cigars, principally of their own manufacture with trade all over this and other States. Mr. E. Zacharias has charge of the factory and store at 723 Penn avenue, from which the wholesale and retail trade is principally supplied; Mr. G. H. Zacharias attends to the management of the Smithfield street establishment. Both brothers are natives of Maryland, but have resided in Pittsburgh for over twenty years.

A. ANDRIESSEN,—*Dealer in Wines and Liquors, 173 Federal St., Allegheny.*

Was formerly engaged in business at Nos. 40 and 42 Ohio street, and removed to his present place of business in the new and elegant buildings adjoining the Franklin Savings Bank. Was born at Detroit, Mich. in 1849, and came to Allegheny in 1872. He keeps constantly on hand a choice assortment of foreign and domestic wines and liquors, and is also a large and extensive dealer in the far famed wines and brandies of California, the "Golden State." Starting in business with the limited capital of \$4,000, he has increased it to about \$8,000. His stock of liquors amounts to \$10,000, and his sales foot up annually to \$20,000. Parties in want of good pure liquors for medical or other use can be suited, both as regards price and quality, by calling on him. All brands of pure, unadulterated Manongahela Rye Whiskey, from one to ten years old, are kept constantly on hand, and warranted superior to any in the city. Remember No. 173 Federal street, Allegheny, Pa.

F. FICHTEL,—*Grocer, 15 Carson St.*

Mr. Fichtel, who established his present business in 1877, is among the best known dealers in Groceries on the South Side. His stock, which amounts to \$15,000, comprises everything usually found in a first-class establishment of the kind. The store, which is 32x60 feet in size, is one of the most commodious business structures in that section of the city. The annual sales amount to \$20,000 and are steadily increasing. The success that has attended this gentleman since he has been engaged in his present business is an evidence that his establishment will always be ranked among the leading concerns of the kind in the city.

WM. A. SEILING,—*Butcher, 141 Beaver Av.*

The business now conducted by Mr. Seiling was originally established by Mr. Hugh Murphy. Mr. Seiling became proprietor in 1877, and under his management the business has steadily increased. He occupies the two-story brick building, 18x40, at No. 141 Beaver avenue, with a stock averaging in value about \$300, and transacts a yearly business of not less than \$8,000. He keeps a choice variety of fresh Meats, Beef, Pork, Veal, Lamb, Mutton, &c., and all kinds of smoked and pickled meats for family use. His prices are as low as the lowest. Mr. Seiling was born in Allegheny City, where he has a large and extensive acquaintance.

T. B. STEWART & SON,—*Dealers in Coal, cor. 43d St. & A. V. R. R.*

The office and yards of this firm are located at the corner of 43rd st. and A. V. R. R., where the business was started by Mr. Stewart 22 years ago. They have two large coal yards, with convenient sidings and tracks, one being 70x150 feet, and the other 50x160 feet, from which the very superior coal of the N. Y. & Cleveland Gas and Coke Co. is delivered to their customers. They are now delivering from 30,000 to 40,000 bushels of Coal per month, mainly to private families. Mr. Stewart was born in Pittsburgh, in 1824, and has lived there ever since. He learned the carpenter trade, working at it for a number of years, afterwards engaging in his present business. Mr. Stewart has been connected with the public affairs of his ward for many years, and is prominently identified with the public schools, being still a member of the school board of his ward.

JOSEPH DIEBOLD,—*Groceries & Provisions, Cor. 11th and Bradford Sts.*

This is one of the oldest Grocery stores in this part of the city, having been originally started by Mr. John Triggesser about 30 years ago. In 1870 it came into the hands of Mr. Diebold, and by his excellent business management has worked up an established trade that will compare well with similar stores in this part of the city. He keeps a general assortment of first-class Groceries and Provisions, such as are demanded by every home, and sells at very low figures. He occupies a two-story brick structure, 40x40 feet in size, and gives his personal attention to the business assisted by members of his own family. He was born in this city in 1839, and is at present a member of the Council from the 29th Ward. Occupying a prominent position, he wields a strong influence in his section of the city.

J. S. HOLLINGER,—*Merchants' Dining Rooms, 46 South Diamond St., Allegheny.*

This excellent caterer and enterprising man of business opened his rooms in 1876 and since that time has furnished thousands of "square" meals in the highest style of modern cookery, at the most reasonable rates. His rooms are models of taste and cleanliness and nothing is wanting on his tables to satisfy the most fastidious epicure. Mr. Hollinger occupies a building adapted to his business in all respects, and the stand being in the Diamond is most eligible. His building is 20x45 feet. He employs eight assistants, supplying the choicest delicacies of the season. Mr. Hollinger was born in Fayette County, Pa., in 1833 and came to this city in 1836. He is a man of worth and respectability.

JAMES RUSSELL,—*Boots and Shoes, No. 92 Federal St., Allegheny.*

This enterprising shoe dealer succeeded the firm of Russel & Kahn in 1869 with a large capital. The amount of his present stock may be placed at \$25,000, and his annual sales do not fall short of \$35,000. These figures will serve to show the extent of the trade, which is both wholesale and retail. Five salesmen are employed, with a weekly pay-roll of \$10. The trade embraces both cities, county and adjacent regions. Mr. Russell was born in Philadelphia in 1828 and came to this city in 1854. He began business here in 1870 with his son-in-law, Mr. Kahn, who died in 1877. Mr. Russell is an excellent man of business, intelligent and enterprising.

THIRD NATIONAL BANK,—Nos. 146 & 148 Wood St.

Justly ranked among the most solid fiduciary institutions of Pittsburgh, the Third National Bank takes a prominent place, and exerts an active influence upon the financial condition of this community. This bank was organized in 1864, with a capital of \$300,000, which has subsequently increased to \$500,000 as at present. The management from its inception has undergone but comparatively few changes. The President, W. E. Schmertz, Esq., has filled that position with distinction for about 14 years. Mr. Wm. Steinmeyer has occupied the office of Cashier for more than eight years, and though the board of directors, from death and other causes, has been subject to the greatest mutations, yet the policy upon which the institution was first conducted, has never changed, and its wisdom has been amply demonstrated by a success that is remarkable even among the successful. As an evidence of this it is but necessary to state that the profits of the bank, as paid to stockholders in dividends, amount to nearly \$800,000 in all since its establishment, leaving a present surplus of \$145,000. The directors, of which the following is a list, are more than usually prominent in their various vocations or professions, and represent not only a vast amount of wealth, but the solid and conservative element of the community: W. E. Schmertz, Chas. Meyran, Geo. D. McGrew, Henry Dallmeyer, Peter Keil, Chas. F. Wells, Jno. Daub, A. C. Draro, and Jno. M. Kennedy. With such a management the Third National Bank is a favorite institution, and while achieving success in all legitimate banking operations, has at the same time retained the respect and consideration of the community.

UNION NATIONAL BANK,—Cor. 4th Av. & Market St.

The success that has attended the career of this well known financial institution has been a matter of frequent remark and in reviewing the monetary organizations in this city, a rank must be accorded it among the first cotemporaneous concerns in Pittsburgh. The Union National Bank commenced business under the National Bank act of the general government, February 1st, 1865, with a capital of \$250,000, and its surplus at the present time is over \$200,000, and undivided profits \$35,558; a pretty healthy commentary upon the ability with which the institution is managed and the acumen that directs its affairs. Mr. John R. McCune, a gentleman whose active interest in every measure promotive of the general good, has been displayed on many occasions, occupies the position of chief executive officer of the bank, and Mr. R. S. Smith, assisted by C. F. Dean, performs the duties of cashier with tact and discrimination. The business of the Union National Bank is very extensive, the deposits averaging considerably over half a million dollars, the loans and discounts at the last statement being \$712,727. General banking operations are transacted, collections made on all points and exchanges effected in Europe or the East. Conducted upon a policy that involves the highest commercial code, the Union National Bank is justly entitled to a prosperity achieved, while conserving at the same time the public confidence, esteem and consideration.

PH. HAMBURGER,—Rye and Bourbon Whiskies, 29 & 30 Diamond Square,

Mr. Hamburger commenced business in 1870, with a comparatively small capital, which has since increased about 600 per cent. He occupies the entire three-story brick building, fronting on Diamond Square 24 feet, and extending back 120 feet, carrying a stock of fine old Monongahela Rye and Bourbon Whiskies, Wines, Liquors, Brandies, Rums, Gins, &c., of both foreign and domestic manufacture, valued at not less than \$25,000. He transacts a large and constantly increasing business throughout the two cities, Western Pennsylvania, Ohio and West Virginia, amounting to \$100,000 or \$100,250 per annum. Mr. Hamburger gives his personal attention to the business and employs five assistants in the various departments of his establishment. This house is noted for the pure and unadulterated old Whiskies always on hand, and the uniform reliability of all goods kept in stock. Mr. Hamburger is a native of Germany, but has for many years resided in this city, and been actively engaged in business here.

R. DIETZ & BRO.—Boot and Shoe Manufacturers, 243 Federal St., Allegheny.

At 243 Federal street, west side, above the parks, and adjoining Geo. Ritter's, is the boot and shoe store of Messrs. R. Dietz & Bro., who were born in Germany, and emigrated to this country and settled in Allegheny in 1860. Their business is carried on in a large three-story brick building, 20x60 feet in size. Messrs. Dietz & Bro. both being first-class workmen, they command a large custom trade, and have had a gradual increase in trade. Their stock of fine French calf-skin boots cannot be surpassed by any house in the city. They warrant good stock and neat fits, and do what they agree.

A. ARMOR,—Druggist, 57 Taylor Av., Allegheny.

The establishment of A. Armor is on the corner of Taylor ave. and Monterey street, on the line of the Pleasant Valley Passenger Railway. The building is a large and commodious two-story brick structure. Mr. Armor keeps a choice assortment of pure drugs and perfumeries which will be sold at bottom figures. He has increased his business largely, now doing a trade of \$5,000 per year, with a stock on hand of \$4,000. Mr. Armor was born in Guernsey Co., Ohio, in 1851, came to Allegheny in 1870, and engaged as clerk with Jos. Park, Esq., until 1873, when he engaged in business at 50 Taylor ave., firm of Ramsey & Armor. The firm was dissolved in 1875 by the withdrawal of Mr. Ramsey. In March, 1878, Mr. Armor removed to this present location.

G. F. BAUER,—Looking Glasses, Picture Frames, etc., 87 Beaver Av., Allegheny.

Every description of Looking Glasses, from the finest French Plate to the more common and less expensive grades, may be found in great variety at the establishment of Mr. G. F. Bauer, No 87 Beaver avenue. He also keeps a fine assortment of plain and colored Engravings, Lithographs, Chromos and other works of art and manufactures Picture and Looking Glass Frames in gilt, walnut or any material desired. He also keeps in stock a full line of frames suitable for any kind of picture. The average stock carried by him is valued at about \$500. He does a flourishing business, which is steadily increasing, and with light expense can offer rare inducements.

JACOB PFIEL,—Groceries and Provisions, No. 1111 Bradford St.

The Grocery and Provision business is of interest to every family, and to the citizens of the South Side, we direct attention in this work to the House of Mr. Jacob Pfiel at No. 1111 Bradford street. You will find here a desirable assortment of Groceries and Provisions, embracing Teas, Coffees, Sugars, Spices, Canned Goods, Soaps, Coal Oil and a hundred other articles suited to house and table, and can buy of him on reasonable terms. He occupies a three story brick building, 18x30 feet in size, and you will find it a pleasant trading place. He started in business in 1875 with a limited capital, and has met with a very good trade. He was born in Butler Co. Pa., in 1843 and came to this city in his youth.

KEYSTONE AXLE WORKS,—Ahlborn & Neckerman, Thirty-third St.

The importance of a work of this character can hardly be overrated in its compilation of the business industries of this city, especially when we remember that in many obscure streets great manufacturing concerns are in operation, turning out valuable and curious articles of which even our own citizens are entirely ignorant. The manufacture of iron axles for buggies, carriages and every description of vehicles is extensively carried on in this city by the firm of Ahlborn & Neckerman at the Keystone Axle Works on Thirty-third St. In 1864 the members of the firm were engaged in the manufacture of tools for oil wells and in the following year founded the present company with a capital invested of \$24,000. This was the first establishment of its kind started in Pittsburgh, and ever since its inception, its business has been such as to fully realize the most sanguine expectations of the firm. Their factory buildings cover an area of 78x120 feet and are furnished with the most complete and perfect machinery of every description required in this line of business, including a patent taper lathe for turning axles, the invention of Mr. Neckerman, and used by no other establishment in the world. Twenty skilled hands are constantly employed in the various departments of the business, at a monthly expense of about \$1,000, and one thirty horse-power engine furnishes the motive power. Their trade is throughout the West, extending to the Pacific Coast with a not inconsiderable demand from many of the Eastern States. The articles manufactured are of a superior quality, both as regards material used, style of workmanship and finish. The members of the firm are thorough practical mechanics, fully conversant with all the details and requirements of the business in which they are engaged. Mr. A. H. Ahlborn and Mr. Neckerman are both natives of Germany and have been identified with Pittsburgh, the former since 1832 and Mr. Neckerman since 1840. Mr. Ahlborn in 1842 and 1843 assisted in the construction of the Iron Ship, Michigan, the first iron vessel ever built in Pittsburgh. This was shipped in pieces to Lake Erie and there put together. Mr. Neckerman held the position of master mechanic of Allegheny Arsenal until the formation of the partnership in which he is now interested. Both members of the firm are gentlemen of unimpeachable integrity, and stand deservedly high in the esteem and confidence of the community. They have both held positions of honor and trust to the entire satisfaction of their constituency, and as members of the city government have always been conspicuous in their efforts to develop the resources and increase the prosperity and welfare of the municipality. They are both justly entitled to a prominent position among the representative self-made men of the Iron City.

BALSLEY & LUTTON,—Notions, Druggist Sundries, Field & Parlor Games, and Children's Carriages, No. 128 Federal St., Allegheny.

Perhaps no firm in either city is more entitled to notice in the particular line of their business than the House of Messrs. Balsley & Lutton. With an extensive stock embracing all the varieties of Notions and Druggist Sundries, Field and Parlor Games, Children's Carriages, besides many other articles in the way of Toys, Wooden and Wicker ware, and all those countless articles included under the name of Fancy Goods, this firm, as jobbers, can well offer to the trade such facilities in selection, and advantages in prices as can not be duplicated by any house in the city. The premises occupied by the firm at No. 128 Federal St., are most eligibly located and of sufficient dimensions to accommodate a stock ranging from \$15,000 to \$20,000, and afford scope for a rapidly increasing trade, that already extends over a large part of three States. The building is a substantial three story brick, 20x110 feet, supplied with all the requisite appointments for conducting the business, 10 assistants being engaged in the various branches of the wholesale and retail departments. Of the individual members of the firm, Mr. Chas. C. Balsley is the senior partner, he was born in Pittsburgh in 1836, and has not only been closely identified with the industrial interests of the city, but has acquired an experience of the most comprehensive character, the benefits of which he is ever ready to place at the disposal of those with whom he has relations. Mr. Albert Lutton is also a native of this city, and though 13 years younger than Mr. Balsley, has obtained a thorough knowledge of the business, having been engaged in the same, during the past five years. The firm was established in 1874, and has achieved an unexpected measure of success, leading to many improvements and the general extension of its resources, and added capacities for the transaction of a flourishing trade. Widely known and respected it is not too much to assert that the house of Balsley & Lutton is not only able to compete in its line with any contemporaneous concern in the West, but has a repute for enterprise and probity that makes it a most desirable one, with which to establish pleasant and permanent relations.

E. W. REINECKE'S EAGLE PHARMACY, 1930 Carson St., S. S.

This very competent Druggist has but recently commenced business, but in a way that plainly indicates his intention of remaining in it. He began with a capital of \$2,000 and this was invested in the very best drugs and such as were especially adapted to the demands of the trade. His stock at present amounts to \$3,000, and this is in constant process of prudent enlargement. The building occupied is a three-story brick structure 15x70 feet in size. It is complete in all details of arrangements, and evinces in every part the taste and culture of the proprietor. The increasing business of Mr. Reinecke has rendered necessary an assistant, while the business essential to a Drug Store is most carefully attended to. Prescriptions are made a specialty in the fullest sense of that term, besides a great variety of articles of taste and luxury, such as toilet articles, etc., are found on the shelves and in the handsome cases of the establishment. The business, for the most part, is local, and yet extends even beyond this particular locality. Mr. Reinecke was born in this city and has received an education which fits him for the profession he has chosen, being a graduate of the class of '77-'78 Philadelphia College of Pharmacy. He possesses that thorough knowledge of his business which is so indispensable to an accurate and reliable druggist.

SAMUEL MAHOOD,—Teas and Groceries, Collins Av. & Station St., East End.

Mr. Mahood was formerly a member of the firm of Voigt & Mahood, Wholesale Com. Merchants on Liberty Street, Pittsburgh. In January, 1878, he established the "Golden Canister Tea Emporium" at the location above given, where he may now be found with a full assortment of choice family Groceries, Extra Family Flour, Teas, Sugars, Coffees, Spices and in fact every article usually found in a first class metropolitan grocery store. He occupies a store room 3' x60, employing two assistants, carrying a stock of about \$2,000 to \$3,000 and transacting a flourishing business of about \$10,000 to \$12,000 per annum. He numbers among his regular customers many of the first families of the East End. Mr. Mahood was born in Ireland in 1839, but has for many years been a resident of Pittsburgh.

WM. H. STEWART, M. D.,—Butler St., opp. Cemetery Gate.

Dr. Stewart has his office on Butler St., opposite the cemetery gate, where he has been in successful practice for a considerable time, having removed to that location from Allegheny City, where he had previously been engaged in practice. He was born in Allegheny, Co. Md., in 1847 and came to Pittsburgh 10 years ago. He studied Medicine with Dr. O. A. Nicholson of Allegheny City and graduated at the Cincinnati College of Medicine and Surgery, after which he began practice with his preceptor, Dr. Nicholson, in Allegheny City, removing from there to his present location after the death of the latter. The Dr. gained his education and qualified himself for his profession by his own unaided effort. He is a gentleman of the highest standing among the medical fraternity, enjoying the confidence and esteem of the public and is building up a prosperous practice.

SOUTH PITTSBURGH PLANING MILL CO.

Cor. Third & Chestnut Sts., South Side.

An establishment so extensive and promoting to such a considerable degree the industrial welfare of the community, as that of the South Pittsburgh Planing Mill Co., is properly a subject for more than passing mention in this work. The Company was organized in 1871 by Joseph Orr, and incorporated under the laws of Penn'a with a capital of \$50,000. The plant is located at the corner of Third and Chestnut streets, the premises consisting of more than one acre, most of which is covered by the buildings, the business being divided into three departments, viz: Box factory, sash and door factory and lumber yard. The capital stock of the Company is now increased to \$86,000 and the trade last year was \$60,000 or over. Thirty to forty men are employed by the Company, whose earnings average weekly \$275. The machinery is the best for the purposes and is operated by one eighty-horse power engine. In the manufacture of flooring, weather-boarding, frames, doors, sash, shutters, mantles, stairs, mouldings and glass boxes this Company excel, and also deal in framing lumber, shingles and laths, and execute to order scroll sawing and turning, besides dealing generally in lumber of all descriptions. The immediate management of the business rests with A. L. Sheaffer, President and Treasurer; James Shaw, Secretary; a board of six directors exercising a general supervision at stated times. That the career of the Company has been eminently successful, is owing in no small degree to the ability with which its operative and financial affairs are conducted, and the reliable and enterprising policy that characterizes its business. The Company is one of the favorite institutions upon the south side.

BOYLE & CO.—Granite and Marble Works, 295 & 297 Penn Av.

Messrs. Boyle & Co. are importers and manufacturers of Granite and Marble Work of every description, making a specialty of fine Cemetery Work, Monuments, Grave Stones, Tablets, Statuary, &c. The house was founded in 1872 by Mr. John Wilkins, Jr., who was succeeded by the present proprietors Jan. 1, 1878, under whose judicious management the business has considerably increased. They occupy the spacious and centrally located premises, 45x90, at Nos. 295 and 297 Penn avenue, with suitable buildings for manufacturing purposes, sales-room and office, carrying a large and judiciously selected stock of manufactured articles and material in the rough, consisting of native and foreign granites, marbles, &c., of the various shades and qualities, turning out some elegant specimens of artistic work pertaining to this line of business. Seven skilled workmen are regularly employed, their semi-monthly pay-roll aggregating about \$450. Their trade, which is principally located in the city and suburbs, amounts to not less than \$9,000 per annum, and is steadily increasing. Fine Granite and Marble work is the specialty for which this house is noted, although every description of stone work is promptly and carefully supplied for building and other purposes. This establishment is fast gaining an enviable reputation for the artistic and elegant workmanship of their various products, and for their reasonable charges. Some beautiful specimens of Mr. Boyle's skill are on exhibition at his ware-rooms. Mr. P. Boyle was born in Ireland, in 1835, and has resided in Pittsburgh for the past thirteen or fourteen years. He is a practical stone cutter, and learned his trade in Baltimore, Md. He has worked at it continuously for the past twenty years, and is thoroughly conversant with every detail of the business.

W. G. STAHL,—Grain and Provision Broker, 293 Liberty St.

Mr. Stahl commenced business in this city more than two years ago as a Grain and General Provision Broker, conducting his business in the same manner as similar dealers have done successfully in the great grain centres of Chicago Milwaukee and other large cities. His business during that period has steadily increased, and his ventures have been universally successful and uniformly acceptable to his numerous customers. Some idea of the extent and magnitude of his business may be gained from the fact that during the month of April, 1879, his books show that in grain alone his transactions amounted to the purchase and sale of over one million one hundred and sixty thousand bushels. He also does a large brokerage business in the standard and staple articles of provisions of every description. His relations and facilities are such that he can purchase or sell any given quantity of grain or provisions at short notice and on the most satisfactory margins. His office is located on the same floor with that of the Western Union Telegraph Company, and he is at all times in direct communication with the Board of Trade, Chambers of Commerce and heaviest operators in Milwaukee, Chicago and the great grain centres of the country. His business is principally derived from local demands and from parties desirous of speculating in grain and provisions, and exceeds by far that of any other similar establishment in the city. Mr. Stahl is an enterprising wide awake and energetic young man, a native of Pennsylvania and born in 1850. In the line of business in which he is engaged he stands preeminently at the head and his prospects for the future are most encouraging.

CENTRAL BANK,—No. 47 Fifth Av.

Among the many coteremporaneous financial institutions in this city the Central Bank has, since its establishment in 1866, maintained a position of undoubted consideration. Incorporated under the State laws, with a capital of \$100,000, from its organization Thomas Fawcett, Esq., has filled the position of chief executive officer. This gentleman is largely engaged in the coal trade, in connection with the firm of Thos. Fawcett & Sons, and is associated with other important enterprises. Mr. Madison Bailey, Vice President, is also extensively interested in the coal business, and is of the firm of Whigham, Bailey & Co. March Hunnings, Esq., Cashier, has been connected with the bank from the date of its organization, with a prior experience in banking of many years. Messrs. A. Kramer, Teller, and M. Y. Robertson, Bookkeeper, are also adepts in their respective departments. The operations of the Bank are mainly in the line of general loans, discounts, deposits, exchange, &c., and are of considerable magnitude. The management is marked by a safe and conservative policy, which has greatly aided the strength and standing of the institution. Altogether the Central Bank is conceded to be one of the most desirable monetary concerns in Pittsburgh with which to establish relations.

J. SCHNEIDER,—Dry Goods, Gents' Furnishing Goods, &c., 1735 Carson St., S. S.

Mr. Schneider commenced business with a small capital, but has been so successful in the pursuit of legitimate gain that his stock on hand now amounts to \$15,000, and his annual sales range from \$25,000 to \$35,000. His store consists of a three-story brick building 20x60 feet, besides a rear building connected with the store, filled with Dry Goods, Trimmings, Gents' Furnishing Goods, &c., in which he enjoys a flourishing trade and general popularity. He was born in Germany in 1830, and came to this city in 1864.

JOHN W. KEMLER,—Watches, Clocks, etc., 1823 Carson St.

Mr. Kemler, who is located at No. 1823 Carson st., near 19th st., commenced business in 1861, without capital. He has succeeded in building up a trade which now reaches about \$5,000 per annum, and carries a stock of Watches, Clocks, Spectacles, Jewelry and especially Opera Glasses in large variety. His store occupies a building 20x35 feet, filled with neat and desirable goods. He was born in Germany, in 1837, and came to this city in 1844. He has long represented his ward in the city council, and has a large influence in that part of the city.

WASHINGTON BECK, —Mfr. of Glass Moulds, Machinery*for Pressing and Working Glass, 56, 58 & 60 Sixteenth St., South Side.*

Among the many ingenious and expert mechanicians that have found ample scope for their abilities in this city, Mr. Washington Beck, especially in that particular branch of his trade which relates to the manufacture of glass moulds and presses, machinery for pressing and working glass, is said to have no compeer. This reputation has been justly earned by twenty years of constant application, labor and invention. The business having been established in 1859 upon a limited scale, has increased gradually under the influence of more prosperous conditions to its present magnitude. The premises occupied by Mr. Beck at present are certainly in great contrast with the original shop, and consist of one large two-story building 60x80 feet, thoroughly equipped with the best machinery known to the trade, much of it being entirely new in device and invented by the proprietor to accomplish certain given objects. Here are employed twenty skilled mechanicians whose weekly earnings average from \$200 to \$250; a ten-horse power engine being required to supply the motive force. As an illustration of the special character of the bulk of the work it may be stated that since Jan. 1, 1879, or within six months, Mr. Beck has been awarded no less than *nine* patents for machinery appliances and devices relating to the improved manipulation and manufacture of glass, and the main part of the business consists in a constant succession of new designs and inventions tending to the more perfect and rapid handling of this material in all its various forms. Mr. Beck is a native of Pittsburgh and was born on the south side in 1839. The reputation he has established is not confined to this country, but leads to a business in Europe, Canada and Japan, which aggregates from \$20,000 to \$25,000 annually. With the largest establishment of the kind in the United States and facilities that are unapproached anywhere, Mr. Beck's enterprise is universally appreciated by the glass trade.

DELAWARE MUTUAL SAFETY INS. CO. of Philadelphia,*P. A. Madeira, Agent, Branch Office, 68 Fourth Av.*

The Delaware commenced business in 1835 with a guarantee capital of \$100,000, subscription notes, twenty-five per cent. paid in cash. In 1843 the assets of the Company amounted to \$223,053.06; in 1858 by resolution of the board of directors the guarantee capital was discontinued and a cash capital of \$360,000 substituted, made up of seventy-five per cent. in the scrip of the Company and twenty-five per cent. in cash. In 1858 the assets of the Company amounted to \$698,801.70, they are now over \$2,000,000. The Delaware is the oldest and most successful Company in America, combining a cash capital with the mutual principle whereby the assured participates in the profits, without incurring any liability whatever beyond the premium paid. As to the conditions on which scrip is issued refer to published statements of the Company. In 1844 an agency for the Company was established in this city, and five years later Mr. P. A. Madeira became its representative, and for thirty years the relations he then bore to the concern have remained in every material point unchanged, a circumstance as unusual as it is satisfactory. The Delaware is no fair weather craft, calculated to navigate only in calm and placid waters, but has buffeted the fiery billows for nearly forty-four years, with what success a reference to the present condition of the Company will show.

J. C. BUFFUM & CO. —Manufacturers and Bottlers, 39 & 41 Market St.

For more than thirty years the name of Mr. Buffum has been identified in this city with the manufacture of Soda Water, Syrups, Root Beer and Ginger Ale, and with the bottling business which has become one of considerable magnitude and importance. Starting in 1845 with moderate means the business of this house has steadily increased until at the present time thirty-five to forty hands are employed with a weekly pay-roll aggregating more than \$300, and nine wagons are engaged in delivering goods to customers in the two cities and to the various railroad depots, to supply their country customers. An average stock of not less than \$30,000 to \$40,000 is carried by this firm, and their annual sales will reach \$50,000. Messrs. Buffum & Co. manufacture a superior article of Soda Water and choice fruit syrups of every flavor, Weiss Beer, Ginger Ale and Root Beer, and bottle immense quantities of Ale, Cider, Lager Beer, Porter, &c., making a specialty of the best grades of Cincinnati and Milwaukee Lager Beer for table and family use. They import direct large invoices of the standard articles of English and Scotch Ales, Brown Stout and London Porter in the wood and bottle for the trade, hotels and families. Their Weiss Beer has attained a very high reputation and is highly recommended for its superior quality and general excellence. They have one engine and all the necessary machinery requisite in their extensive establishment, which is located in the spacious double three-story warehouse 40x100 feet with cellars, at Nos. 39 to 41 Market street. This is one of the oldest, most extensive and best known establishments of the kind in the West, and the high estimation in which the house is held has been secured by the energy, enterprise and reliability of the firm and the superior quality of all goods manufactured and sold by them.

SPEER & MORGAN, —Tin, & Copperware, etc., 75 Frankstown near Station.

These gentlemen commenced business on a moderate capital, which their increasing trade has enabled them to augment considerably. They carry a full stock of Stoves, Ranges, Grate Fronts and House Furnishing Goods, and manufacture Tin, Copper and Sheet Iron ware, giving special attention to roofing and spouting; their annual sales are from \$3,000 to \$1,000. The store occupied by them, and well filled with attractive and substantial wares, is 18x50 feet in size. The firm consists of John Speer and Oliver Morgan, young and energetic merchants. Their business promises to take a front rank in the East End. Both gentlemen are natives of this city, Mr. Speer having been born in 1848 and Mr. Morgan in 1847. Mr. Speer served with honor throughout the rebellion in the 5th Penn'a heavy artillery; both gentlemen stand deservedly high in the community.

CRUIKSHANK BROS. —Grocers, Cor. Monterey St. and Taylor Av., Allegheny.

These two young and enterprising merchants opened this establishment early in the present year with from \$2,000 to \$2,500 worth of well selected stock, embracing every variety of Groceries, Canned Fruits and Vegetables, and an excellent assortment of all articles found in a first-class grocery and produce house. They occupy a well located brick building, and employ one hand in addition to their own services, which they give exclusively to the business. George L. Cruikshank was born in Allegheny, in 1856, and his brother, John F., in 1863. They are both thoroughly acquainted with all the details and requirements of the grocery trade, and are both persevering and progressive business men, and do a trade of about \$25,000 per annum. They are courteous and polite to everyone, and popular with all who have dealings with them.

MRS. J. ARNOLD, —Books, Stationery & Fancy Goods, 98 Federal St., Allegheny.

Mrs. Arnold commenced business, at her present location, in March, 1865. She occupies a three-story brick building, 20x60, with a finely selected assortment of Books in great variety, Stationery, Toys and Fancy Articles. Here may be found the most elegant and recherche styles, and large variety for children and grown people. Mrs. Arnold was born in Ireland, Jan. 6, 1827, and has resided in Allegheny City since 1834.

CITY INSURANCE CO. *of the City of Pittsburgh,—Office, 64 Fourth Av.*

Incorporated April 1870, as a Fire, Marine and Inland Insurance Company, this institution commenced business December 15, 1870, and through all the commercially disastrous periods since, has continued yearly to augment and increase its operations and its usefulness, until it is now regarded as one of the substantial associations of the Iron city. Robert J. Anderson, Esq., President, is well known throughout the country as a steel manufacturer of unsurpassed energy and public enterprise, whose works in extent and capacity will rank with the most extensive in the world. Capt. R. J. Grace, the Vice President and General Agent, is known as an able underwriter; the Treasurer, Mr. Wilson Cunningham, is one of the solid men of our city, having been at the head of the glass manufacturing business for a number of years, and adds strength and stability to the organization; and John R. Gloninger, Esq., Secretary; all being well and favorably known to the public. It is in no small degree owing to their exertions that the City Insurance Company has made so admirable a reputation as a reliable and healthy institution. With a paid up cash capital of \$100,000 and assets that reach nearly double that sum, the business of the Company has been uniformly prosperous, doing a moderate agency business with conservatism and prudence, and has been equally successful in this branch; one of the most active and successful agencies being conducted by Messrs. Wm. L. Tete & Co., whose office is located at 129 South 4th street, Philadelphia. Managed by so proficient a corps, to whose probity and discernment is added the advice of a board of directors, who are chosen from among the leading citizens in various pursuits, who have made its career so brilliant in the past; a more favorable condition of general finance and trade must redound to its benefit to a marked degree, and insure a growth and importance commensurate with the ability of its management and liberal policy.

McCord & Co.—*Wholesale & Retail Hats, Caps, Furs, &c., 131 Wood St.*

The origin of this house dates back to 1798, when the business was established by Mr. Robert Peeples and conducted by him for about eighteen years, when he withdrew, after a career of 20 years, in favor of McKee & Graham, who in turn were succeeded by McLain, King & McCord in 1833. This firm continued for some time, changing finally to McCord & King, and at last to the present style and status which has remained practically unaltered for many years; the several members of the house being John D., James S., James E. and Andrew McCord. The premises occupied are situated as above and consist of one extensive five-story building stocked to the value of \$50,000, with every variety of Hats, Caps, Furs and Straw Goods, pertaining to a thoroughly managed concern in this line. It is not the province of this work to deal in fulsome laudation, but in this case it is safe to assert that while no concern in the city occupies a more respectable position, none has been conducted upon a more conservative, safe and honorable policy, and this statement is due as much to its predecessors as the present firm. With such characteristics and a career extending over four-fifths of a century, it is a natural sequence that the business of the house should be as extensive as it is in this respect reaching for its trade not only throughout Penn'a, but the adjacent States, and in every way standing at the head of its cotemporaries, both in the advantages offered to buyers and the general range and quality of goods.

DIAMOND NATIONAL BANK,—*Cor. 5th Av. & Liberty St.*

Originally organized as the Diamond Savings Bank in 1870—the scope and increasing prosperity of its first years led to its re-construction in 1875 as a National Bank, since which time the success of the institution has been so pronounced as to rank it among the first financial concerns in the Iron City. The management is placed in the hands of Mr. A. Garrison, of the firm of A. Garrison & Co., as President; Wm. M. Hersh, Esq., Vice President, and Mr. John S. Seully, Cashier; with a board of directors composed of men prominent and esteemed in their respective vocations. With a capital stock of \$200,000 and deposits to the amount of \$327,224.44, loans and discounts \$332,470.69, surplus and undivided profits \$7,810.23, it may readily be seen that the Diamond National Bank is governed by a rigid conservative policy—so much so that no customer is allowed to borrow more than \$5,000 upon the same endorsements. Under these circumstances the bank is regarded upon a par with many of its cotemporaries who perhaps seek to occupy a more conspicuous position.

HENRY DAUB,—*Fashionable Merchant Tailor, Cor. 38th & Butler Sts.*

Mr. Daub began business in 1861 in partnership with Henry Cappel, under the firm name of Daub & Cappel; at that time they were located at No. 135 Smithfield street. In 1865 Mr. Cappel retired from the firm and the business was continued by Mr. Daub until 1871, when he removed to the large three-story brick building on the corner of 38th and Butler streets; he carries \$4,500 worth of stock and does a local business of about \$12,000, in good times more. Mr. Daub was born in Germany in the year 1830, came to the United States in 1849. He has figured considerably in the local politics of the city—he was a member of the City Council in 1868-9, was also a member of the School Board at the same time and still is, from the 15th ward. Mr. Daub is and has been for several years a Director of the Metropolitan National Bank of the 17th Ward; is President of the Enterprise Insurance Company of this city.

JOHN H. DEAN,—*Groceries & Flour, 91 Rebecca St., Allegheny.*

Desirably located in a populous section of the beautiful city of Allegheny, the Grocery, Flour and Produce House of Mr. John H. Dean is worthy of notice in a work devoted to the business interests of the two cities. This house was established in 1874 by the present proprietor with moderate means and in a comparatively small way, but during the past five years his trade has steadily increased and he now transacts an annual business of not less than \$30,000. He occupies the two-story brick building 18x45 at No. 91 Rebecca street, carrying a stock of about \$3,500 comprising a full line of choice family groceries, fruits, sugars, coffees, teas, spices and extra brands of flour. Mr. Dean gives his personal attention to the business and employs two assistants. His trade is of the better class and is steadily increasing from year to year. Mr. Dean is a native of Pittsburgh, and was born in 1853. He is an energetic and reliable business man thoroughly conversant with the business in which he is engaged.

ELWOOD & McCracken,—*Grain Merchants, 365 Liberty St.*

The firm of Elwood & McCracken have a standing in the grain and feed trade and extensive business that gives them a prominence entitled to due consideration. Established with a fair capital by R. D. Elwood and B. McCracken under the above style, in 1873, the firm with a comprehensive knowledge and experience in the business, devoted itself particularly to handling flour, feed, grain, seeds and wool, making a specialty of rye. Their excellent business capacity has enabled them to reach the sum of \$150,000 annually. The business premises are capacious and consist of one large three-story brick edifice 25x110 feet. Mr. Elwood is a Pennsylvanian, and came to Pittsburgh in 1872; Mr. McCracken has been a resident of this city for 20 years, and both have had an active and successful career. Referring to the Second National Bank, and Allen, Kirkpatrick & Co., this city, and James Steel & Co., Philadelphia, the firm is esteemed for its thorough reliability.

A. & T. M'KENNA,—Brass Founders, No. 122 Third Ave.

Every description of fine Brass-work is manufactured by this well known house, which was established in 1856, by A. & J. M'Kenna, who were succeeded in 1875 by the present proprietors. The capital invested in the business is \$18,000 and their annual sales reach about \$35,000. They occupy three floors, each 30x55, at 122 Third Ave., and their business is confined exclusively to brass work, of which they manufacture and carry in stock a large assortment, consisting in part of Ale and Beer Cocks, Foot Rails, Counter Rails, Back Rails, Window Guards, Door Pulls, &c. They are also exclusive manufacturers of M'Kenna's Patent Combination Pump and Ventilating Faucet for drawing and preserving Ale and Beer. These articles are made with great care and specially adapted for the Saloon and Liquor trade. This Faucet was patented by Mr. M'Kenna, and is no longer an experiment, as over seven thousand are now in use all over the United States, and in every instance they give perfect satisfaction. This firm also make a specialty of fitting up Show Windows with movable and stationary Rails, Brackets, &c., such as are used by Tailors, Furnishing stores, Millineries, Hatters and Variety stores. They employ fifteen skilled workmen in their manufacturing department, with a weekly pay roll amounting to about \$200. One eight horse-power Engine furnishes the motive power for their machinery, which is of the best and most approved pattern. The trade of this house is in more than thirty states, and the superior quality of their goods have given them a national reputation. They sell more goods at present in St. Louis than in any other city. Mr. A. M'Kenna was born in Ireland in 1832, but he has resided in Pittsburgh since he was two years of age. Mr. T. M'Kenna is a native and lifelong resident of Pittsburgh, where he was born in 1856.

C. P. CAMPBELL,—Insurance Agent, No. 46 Wood St.

Mr. Campbell has been engaged in the Insurance business in Pittsburgh since 1875, and now represents some of the leading Companies of Europe and America, among which we may mention The North German of Hamburg, Germany, with a capital of \$1,125,000. The New York City of New York, cash capital \$500,000. The Clinton of New York, cash capital \$250,000. The Trade of New Jersey, capital \$200,000. The Merchants, and Mechanics of Virginia, capital \$250,000, and others equally reliable. His business, which is principally in Pittsburgh and Allegheny, amounts to about \$22,000 per annum in premiums. Mr. Campbell was born in Pittsburgh in 1852, and is a lifelong resident of the city. His business will compare favorably with that of any other agent in the city.

H. HOLTZMAN, (formerly Holtzman & Wiederhold,) Practical Decorative Upholsterer, 74 Wood St.

The reputation of Mr. Holtzman, as a practical Upholsterer, during twenty years experience in Pittsburgh, has become so well established, that it would be a work of supererogation to comment upon it, in a work of this description. The house of Holtzman and Wiederhold was established in 1859, and for twenty years it has sustained the reputation of being the leading Upholstery Establishment of Pittsburgh. In January 1879, Mr. Wiederhold retired from the firm, and the business is now conducted by Mr. Holtzman, who occupies four floors of the building, No. 74 Wood St., each 14x55, carrying a stock of about \$8,000, comprising every description of Window Decorations, Lace Curtains and Lambrequins, Cornices and Cornice Poles of the Queen Anne and Eastlake Styles, and new and elegant designs in Walnut, Ebony, Ash, Gilt and Brass, Spring Beds and Mattresses of all kinds, Comforts, Pillows, &c. He pays special attention to fitting and putting down carpets, cleansing lace curtains, &c. His yearly trade amounts to about \$30,000 to \$50,000, and he gives employment to fourteen hands in his two departments of Upholstery, Cornice and Drapery rooms, which latter department is the specialty of this house. Mr. Holtzman was born in Alsace, then a portion of France, in 1835. He came to this country in 1855, and to Pittsburgh the same year, where he has since resided.

JOHN THOMA,—Leather and Shoe Findings, 74 Smithfield St.

The trade in Leather and Shoe Findings, and the manufacture of Boot, Shoe and Gaiter Uppers is carried on to a considerable extent in Pittsburgh, and forms no inconsiderable item of her annual trade and commerce. One of the principal merchants engaged in this line of business, is Mr. John Thoma, who occupies three floors of the building, 20x55 feet, situated at 74 Smithfield St., giving steady employment to two experienced hands, and carrying an average stock amounting in value to about \$10,000. Mr. Thoma was born in Germany in 1825. He arrived in America in the year 1852 and located in Pittsburgh in 1855. In 1865 he commenced business for himself and now transacts an annual business of \$18,000 to \$20,000, which compares favorably with that of any similar establishment in the Iron City. His trade is principally local, and the manufacture of Uppers is one of the specialties of this House.

SNIVELY & RADCLIFFE,—Wall Paper, 173 Smithfield Street.

One of the leading houses engaged in the Wall Paper business in Pittsburgh is that of Snively and Radcliffe, wholesale and retail dealers in Wall Paper, Window Shades, Shade Cloth, Oil Cloths, &c., at No. 173 Smithfield street. This house was established in 1876, by the present proprietors, Mr. John S. Snively and Mr. Wm. Radcliffe, both natives of Allegheny county and residents of Pittsburgh since childhood. They carry a stock of goods pertaining to their line valued at about \$6,000, and transact a yearly business, principally of a local nature, amounting to about \$15,000. The size of their salesroom is 19x60 feet, and the specialty of this house is Wall Paper, of which they keep a full line of all the latest styles and most desirable patterns.

A. A. HUTCHINSON & BRO.—Coal and Coke, No. 94 Fifth Avenue.

The superiority of the celebrated Connellsville Coke, for foundries, blast furnaces, breweries and other large manufacturing establishments, is well known in almost every section of the United States, and the manufacture and shipment of the same constitutes a very important item of the business interests of the Smoky City. One of the largest concerns engaged in this branch of business is that of A. A. Hutchinson & Bro., the members of the firm being Messrs. A. A. & T. B. Hutchinson. The firm was established by its present members in 1872, and their office is now located at No. 94 Fifth Av. They are very extensively engaged in the mining of the well known Connellsville Coal and the manufacture of a superior article of Coke therefrom, for which they were awarded a diploma and medal at the late Centennial Exposition in Philadelphia. Their mines, which are known as the "Globe" and "Standard" Mines, are located in the line of the Mt. Pleasant R. R., near Broadford, Fayette co., Pennsylvania, one tract measuring one hundred and seventy-five acres, and another one hundred and fifty acres, from which a very superior article of coal is obtained, capacity 350 tons Coke per day. They employ at their mines two hundred hands and their monthly pay-roll aggregates about \$8,000. The demand for their Coke is principally west and in the various manufacturing towns and cities on the Ohio River, although they ship to all parts of the United States, both East and West, from the cities of the Seaboard to Salt Lake City. The amount of capital invested by this firm is over \$150,000 and their annual trade varies from \$150,000 to \$200,000. Mr. A. A. Hutchinson was born in Ireland in 1844, and Mr. T. B. Hutchinson two years later. They arrived in this country in 1850 and came to Pittsburgh the same year and have resided in the city ever since.

JAMES MILLIKEN & CO.—*Furniture, No. 89 Smithfield St.*

So much pride is now taken in the ornamentation of our homes, that Fine Furniture has become an indispensable article to all who desire to keep up with the progressive spirit of the age.

Prominent among the business houses of the Iron City engaged in this line of trade is that of James Milliken & Co., at No. 89 Smithfield Street, (Howard Block). This firm was established in 1875 by the present proprietors, Messrs. James and A. Milliken. Both gentlemen are natives of Ireland. The senior partner came to the United States in 1856 and settled in Pittsburgh, and the junior member of the firm ten years later. They occupy four stories and the basement 18 by 60, and their large and elegant stock is selected with great care,—beauty of design, durability and general excellence being the *desideratum* always in view. The members of the firm give their personal attention to the business, and three assistants are required in their sales department. This business, which is that of general Furniture dealers, is largely local, although they have quite an extensive trade in Western Pennsylvania, Eastern Ohio and West Virginia. Notwithstanding the general depression in business and the unprecedented competition in their particular line, their sales during the past year have been large, and all the indications for the future are very flattering.

M. W. RANKIN,—*Wholesale Grocer & Commission Merchant, No. 10 Smithfield St.*

Mr. Rankin, who occupies the four-story warehouse 21x76, at No. 10 Smithfield street, (opposite the Monongahela House,) is a native of Ohio, having been born in the "Buckeye State" in 1826. He came to Pittsburgh in 1845, and ten years later founded the business in which he is now engaged. He carries a stock ranging from \$12,000 to \$15,000, and transacts a yearly business of from \$75,000 to \$100,000, employing four hands. His trade is principally in Ohio and Pennsylvania, and in addition to the line of goods directly pertaining to the Grocery business, he deals extensively in Provisions, Cheese, Carbon and Lard Oils, etc., etc.

W. J. CASKEY,—*Groceries, Provisions, &c., No. 25 Smithfield St.*

There are in Pittsburgh a large number of business houses, whose principal trade is connected with the River interests, furnishing supplies to the vast fleet of steamboats, which make Pittsburgh their headquarters. Prominent among the establishments making this branch of trade a specialty, is the house of Mr. W. J. Caskey, located at No. 25 Smithfield street, in convenient proximity to the Monongahela Wharf, which is the general rendezvous of steamboat and river men.

Mr. Caskey was born in Pittsburgh in 1843, and having always resided here, has a very large acquaintance among the business men of his native city. In 1874 he commenced business for himself, and his career since that time has been marked by a degree of success which has been truly encouraging. He occupies three entire floors of the spacious warehouse, 20x55 feet, at the number above mentioned, where with a stock averaging from \$8,000 to \$10,000, his annual sales reach from \$40,000 to \$50,000. Mr. Caskey employs four assistants, and his local trade, in addition to that derived from the River, is large and steadily increasing.

MELLOR & HENRICKS,—*Pianos and Organs, No. 79 Fifth Avenue.*

For nearly half a century the name of "Mellor" has been familiar to the musical portion of the community of this section of the country, for in 1831 Mr. John H. Mellor established himself in the Smoky City as a dealer in Pianos and Musical Merchandise, since which time the business has continued in the family name with but few variations in the style of the firm. In 1878 Mr. Charles C. Mellor, at that time sole proprietor of the establishment, disposed of his interest in the sheet music and smaller instrument department to Mr. Geo. Kappel, and associated with himself Mr. J. R. Henricks for the purpose of dealing exclusively in Pianos and Organs.

These gentlemen occupy four floors of the elegant warehouse 60x240 feet, at No. 79 Fifth Avenue, carrying a stock of from one hundred to one hundred and fifty Pianos and Organs, employing seven assistants at this point and having agencies all through the country. Their annual business amounts to more than \$100,000, which is not confined to any particular section, although largely distributed through Pennsylvania and Eastern Ohio. The line of instruments principally represented by this firm are the celebrated Weber and Hazelton Pianos and the Mason & Hamlin, and Palace Organs, although in their extensive stock may be found instruments of almost every manufacture known. Mr. C. C. Mellor was born in Pittsburgh in 1836 and has since his youthful days been identified with the music trade of his native city. Both members of the firm are gentlemen thoroughly conversant with the business in which they are engaged, and all representations made by either may be implicitly relied upon.

LANGENHEIM & SHEPARD,—*Flour & Groceries, 52 & 54 Seventh Ave.*

This house was established fifteen years ago by Schomaker & Langenheim, who were succeeded by the present firm in 1877. Mr. G. Langenheim was born in Germany in 1834 and has been a resident of Pittsburgh for the past twenty-four years. Mr. Otis Shepard, his partner, is a native of Pittsburgh, where he was born in 1835. He is a lifelong resident of the Iron City. They occupy the large double warehouse at Nos. 52 & 54 Seventh ave., carrying a stock of \$40,000 to \$65,000. Their trade, which is principally in the states of Pennsylvania and Ohio, amounts from about half a million to a million dollars annually and compares favorably with that of any other house engaged in the same line of business West of the Mountains. They handle immense quantities of Flour and a general line of Groceries, Provisions, &c. This is one of the representative business houses of Pittsburgh in point of size, amount of business transacted, mercantile integrity and unquestioned reliability.

WOLFF, LANE & CO.,—*Hardware and Cutlery, No. 50 Wood St.*

Conspicuous among the representative business houses of Pittsburgh, that of Wolff, Lane & Co., importers and dealers in every description of Hardware and Cutlery, may be mentioned. This house was founded in 1836 as Whitmore & Wolff. It subsequently became Whitmore, Wolff, Lane & Co., and in 1877 the present firm succeeded, the individual members of which are, C. H. Wolff, Thos. H. Lane, John D. Cherry, G. M. T. Taylor and Horace G. Darsie. They occupy the spacious ware-rooms at No. 50 Wood St., 20x120 feet, the entire four floors and basement, being filled with every variety of Goods pertaining to this line of business. These ware-rooms are undoubtedly the best arranged and most completely fitted up of any in the United States, for conveniently carrying on such an extensive business. Their trade, which extends throughout the States of Pennsylvania, Ohio, West Virginia and Virginia, amounts in round numbers to not less than \$200,000 per annum. In addition to the members of the firm, who give their personal attention to the business, twelve salesmen and clerks are employed, and the business of the house will compare favorably with that of any similar establishment in the West.

ALPH. J. POTZER,—*Hats, Caps & Furnishing Goods, 334 Liberty St.*

Mr. Potzer was born in Salem, Westmoreland County, Pennsylvania in 1847, but has been a resident of Pittsburgh since 1852. The present establishment was started by him in 1877. He occupies the store No. 334 Liberty Street, 20x60, with a stock of goods valued at about \$6,000, consisting of Hats, Caps and Gent's Furnishing Goods in great variety. His sales, which amount to from \$8,000 to \$10,000 per year, are principally to residents of the Smoky City and customers living along the line of the Pennsylvania Railroad. Mr. Potzer has a complete and well selected assortment of all articles pertaining to gentlemen's head wear, and furnishing goods, and his prices are uniformly low.

J. FULLERTON & SON,—*Tobacco and Cigars, No. 332 Liberty St.*

This house, which was established in 1837 by Mr. Fullerton senior, is the oldest in the city with but a single exception, engaged in this line of trade. Mr. John Fullerton was born in Ireland in 1810, and came to the United States in 1823, settling in Pittsburgh the same year. In 1837 he established the business of manufacturer and dealer in Cigars, which was continued under his name until 1870, when by the admission of his son, Mr. W. W. Fullerton, as a partner, the firm name became as above. Mr. Fullerton junior, was born in Pittsburgh in 1845, and has since resided in the city. They occupy the large and spacious ware rooms, 20x65, at No. 332 Liberty street, where they carry on a jobbing trade in all varieties of manufactured Tobacco and Cigars, amounting to not less than \$100,000 to \$125,000 per annum, and carrying a stock estimated at about \$14,000. Their trade is principally in Pennsylvania and Ohio, although they frequently fill large orders from other States. They sell a larger quantity of Cigars than any other house in the city, their sales last year exceeding \$3,000,000 of the various grades and qualities. Their stock embraces all lines of goods pertaining to the trade, but the specialty of this house is Cigars, of which they have forty-two brands of their own, which have a widespread and well deserved popularity, and are sold in almost every State in the Union.

THOMAS McANDREW,—*Livery and Sale Stable, No. 117 Third Ave.*

The premises occupied by Mr. McAndrew at No. 117 Third avenue, opposite St. Charles Hotel, are 20x100 feet in size and conveniently arranged for the business in which he is engaged. He commenced at this location during the present year, and has already secured a satisfactory business. He now has four fine horses and carriages to hire, and will undoubtedly soon largely increase his facilities. Mr. McAndrew was born in Ireland in 1834, came to the United States in 1860 and to Pittsburgh in 1865.

C. HOTING & SONS,—*Grain, Hay, Straw & Mill Feed, 119 Water St, & 156 First Av.*

The four story warehouse, 20x180 feet, at No. 119 Water street and extending through to First avenue, is occupied by the above named firm as a Grain, Hay and Feed Store. The house was established in 1875 as Irven and Hoting. In 1876 the present firm succeeded to the business, which now amounts to about \$22,000 per annum. The amount of capital invested in the business is \$8,000, and they carry a stock of from \$1,000 to \$1,500, giving employment to three assistants. This trade is principally local and along the lines of the B. & O., and the P. V. & C., Railroads. Mr. C. Hoting was born in Germany in 1825, he came to the United States in 1850 and settled in Pittsburgh the same year. Mr. G. C. Hoting was born in Allegheny City in 1859, and Mr. R. C. Hoting in the same place in 1853. They are active and energetic business men and stand well in the mercantile community.

CUNNINGHAMS & CO.—*Pittsburgh City Glass Works, No. 109 Water St.*

With Pittsburgh as the acknowledged Headquarters of the Glass trade of the United States, it is eminently fitting that she should also contain within her corporate limits the largest glass manufactory in this country. The Pittsburgh City Glass Works were founded in 1849 by Mr. Cunningham, two other brothers and Mr. George Duncan. In 1865 the firm became Cunninghams & Ihmsen, and continued under that style until 1878, when it was dissolved by the purchase of the interest of Dominick Ihmsen by the remaining partners, and the firm name became Cunninghams & Co. The business was started in a comparatively small way with but one factory. They now have three extensive factories, making those works the largest in the United States. The capital invested by this firm is \$250,000, and the average stock carried by them is from \$60,000 to \$80,000. Their annual business is correspondingly large. Their works are located on 26th Street, south side, and with all the buildings cover two entire blocks. They have one office at the works and another at their ware rooms, No. 109 Water street, at their factories they employ from 250 to 300 workmen at a weekly expense of about \$2,000. Their trade extends all over the United States and from Canada to Mexico. They manufacture all kinds of Glass ware, Window Glass and Bottles. Mr. Wilson Cunningham was born in 1812. Mr. Robert Cunningham in 1817 and Mr. D. O. Cunningham, son of the senior member of the firm, in 1834. They are all natives of Allegheny county and highly respected as public spirited citizens and reliable energetic business men.

KAUFMAN, OPPENHEIMER & CO.—*Wholesale Clothiers, 233 Liberty St.*

As Jobbers and Dealers in Clothing, Piece Goods and Tailors' Trimmings of all descriptions, and Manufacturers, the above house is not to be omitted in any just record of the history of the industries of Pittsburgh, and has had no small bearing upon the general welfare of the community.

Established as a retail concern in 1851, under the title of Klee & Kaufman, in Allegheny, the business was removed to Pittsburgh in 1860, and from that period has been devoted exclusively to the wholesale trade. In 1865 Mr. Klee withdrew, and Mr. M. Oppenheimer and his brother became partners in this house under the above style, which has not been changed, though the junior partner retired some time ago, leaving the "Co." merely nominal.

From the commencement to the present time success has attended the operations of this concern. Started with a capital of the most limited character, the business has constantly increased and the resources augmented proportionately.

From a comparatively unimportant foundation the business has grown to the dimensions of not less than \$250,000 per annum and still enlarges.

The premises occupied by the firm at the present time are of the most ample and complete dimensions, consisting of one large four-story stone front brick building 20x240 feet, running from Liberty through to Penn avenue. This firm manufacture all the clothing sold by them. They employ constantly 150 men and women in the manufacturing of Men's, Youths' and Boys' Clothing, besides their hands in the store, counting-house and salesrooms. The present partnership has existed 14 years, and prior to that time Mr. Kaufman was connected with Mr. Klee for a like period.

In all, for 28 years, the senior partner of this house has been identified with the industries, progress and development of this city, adding no little to its reputation as a commercial centre.

Not only in Pennsylvania, but in the contiguous States, this house has prosecuted a successful trade, to such a degree that the establishment is now justly regarded as taking rank among the first of its kind in the community, and is well entitled to the consideration in which it is universally held.

J. S. DILWORTH & CO.—*Wholesale Grocers, Nos. 130 & 132 Second Ave.*

Among the representative business houses of Pittsburgh the name of Dilworth has for many years occupied high and honorable positions, and in the wholesale grocery trade the firm of J. S. Dilworth & Co., has for nearly forty years been recognized as the leading one of the Iron City. This house was established in 1840 by John S. and Joseph Dilworth, and became as at present in 1847, since which time the business has been conducted under the same name and style, although Mr. J. S. Dilworth the founder of the house is no longer living. The present partners are W. P. Dilworth (who was born in Pittsburgh in 1844), De Witt Dilworth (born in Pittsburgh in 1853), and James W. Houston (born in Ireland in 1852, but for many years a resident of Pittsburgh). The capital invested in the business is \$60,000. The amount of stock carried by the firm ranges from \$35,000 to \$40,000 and their annual sales exceed \$550,000. They occupy the spacious warehouse, 40x85 feet, three stories and basement, at Nos. 130 & 132 Second avenue, and employ ten salesmen and assistants. Their trade, which will compare favorably with any house in the city, is principally within a radius of 150 miles of Pittsburgh, in Western Pennsylvania and Eastern Ohio. While they keep a full line of all articles pertaining to the Grocery trade, the specialty of this house is in New Orleans Sugars, Syrups and Molasses.

VOIGT, MAHOOD & CO.—*Commission and Produce, Merchants, 257 Liberty St.*

As a very important branch of the commercial industries of Pittsburg, the Commission Produce business is entitled to a large share of consideration, in which connection it would be impossible to overlook the house of Voigt, Mahood & Co., occupying, as it does, perhaps the most conspicuous position of any concern in that line of mercantile enterprise.

Established in 1861, by L. H. Voigt, Esq., with a capital of but \$500, the concern seemed at once to achieve a signal success, the business of the first year being over \$40,000, increasing during the latter part of the war to the enormous sum of half a million dollars per annum; and, even now, at the reduction in the price of all produce and commodities, the business runs up into many thousands annually.

With so little capital to start upon, the inference is that there must have been some compensating balance for this lack in the energy and natural aptitude and capacity of its founder to have produced with such limited means such considerable results. Such an assumption does but simple justice to the firm whose relations extend, not alone over the entire United States, but include every conceivable line of produce merchandise and Pittsburgh manufactured goods.

The firm is composed, under the above title, of L. H. Voigt and A. M. Voigt. They occupy as business premises No. 257 Liberty street—an ample three-story brick house, 22x110, with basement—employ 10 hands, and one five-horse power engine for hoisting. It is regarded as the largest commission house in the city, and has a standing and repute commensurate with the extent and solidity of its business.

PRENTICE & HACKETT,—*Cement, Lime, etc., Nos. 46, 48 & 50 Ninth St.*

The house of Prentice & Hackett was established in 1877 and is the only one in the city importing the genuine Portland Cement direct from foreign countries. They are also sole agents for the celebrated Buckeye Cement, and deal largely in Rosendale, Louisville and other American Cements, White Lime, Calced and Land Plaster, White Sand, Marble Dust, Whiting, Kalsomine, Sewer Pipe, Stove Pipes, Chimney Tops, Flue Linings, Tena Cotta Ware, Fire Brick, Grate Tile, Fire Clay and Fertilizers. They occupy the extensive premises at the number named, employing five hands, and transacting a large and flourishing trade in the articles named, extending over Western Pennsylvania, Eastern Ohio and Western Virginia. This House, with its large facilities, is always prepared to take large contracts in their line. The Lake Erie and Pittsburgh railroad line was furnished by this firm with the hydraulic cement in the masonry work of that road. The Government also selected this well-known firm to furnish it with supplies on their work in Western Virginia, as did also the Navigation Company. The Westmoreland and Indiana County Works received their supplies from this energetic firm. Both members of the firm are natives of the State and have had many years practical experience in their business.

J. P. HUGHES,—*Cigar Manufacturer, No. 27 Fourth Avenue.*

There is a large number of cigar manufactories in the Smoky City, and the annual production of this class of goods constitutes no insignificant item in the general aggregate of her commercial importance. Mr. J. P. Hughes, whose place of business is now located at No. 27 Fourth Avenue, is one of the prominent cigar manufacturers and dealers of Pittsburgh, turning out annually about 700,000 of the various brands and grades. Mr. Hughes was born in Pittsburgh in 1837, is a practical cigar maker himself, and employs in his establishment six experienced hands regularly, at a weekly expense of about \$50. He has been engaged in business in his own name for about six years, and many of the brands manufactured by him have acquired a national reputation and well deserved popularity. He occupies as sales-room and manufactory the four-story brick building, 25x60, at No. 27 Fourth Avenue, where he carries an average stock of from 80,000 to 100,000 cigars of various grades, valued at about \$2,000, and transacts an annual business of over \$10,000. His retail trade is principally local and his wholesale business extends throughout many of the towns of Western Pennsylvania. Among the leading brands manufactured by Mr. Hughes we may mention "High Life," "Excelsior," "Jewel," and "Prefecto." He is also exclusive proprietor of ten or a dozen other favorite brands, ranging in price from \$10 to \$60 per thousand. The tobaccos used by Mr. Hughes are Kentucky and Ohio for stogies, and for the other brands, Havana, Pennsylvania, Massachusetts and Connecticut. He also keeps constantly on hand a full line of manufactured Tobacco, Snuff and Smokers' Articles.

JAMES BOWN & SON,—*Enterprise Gun Works, 136 and 138 Wood Street.*

For more than thirty years the name of Mr. Bown has been identified with the gun business in the Iron City, the Enterprise Gun Works having been established in 1848 by Bown & Tetley. In 1862, Mr. James Bown became sole proprietor, and in 1871, Mr. Wm. H. Bown, his son, was admitted and the firm name became James Bown & Son, under which style it has continued to the present day. They occupy three floors of the large double store, 30x60, at Nos. 136 and 138 Wood street, employing twenty-six skilled workmen, and their weekly pay-roll amounts to about \$275. Their stock, which is full and complete in every variety of Guns, Rifles, Revolvers, Fishing Tackle, Sportsmen's Articles in General, Razors, Scissors, Pocket and Table Cutlery, is estimated at from \$20,000 to \$25,000, and their annual trade is now about \$70,000, extending over the greater portion of the United States from the Atlantic to the Pacific Ocean. While they are large manufacturers of Rifles, Rifle-barrels, Shot Guns, etc., they also deal extensively in the best articles of foreign and American make, doing a large wholesale as well as retail business. They carry the finest lines of Cutlery to be found in the West, and the motto of the firm for more than a quarter of a century has been "Quick Sales and Small Profits."

Mr. James Bown was born in England in 1823, and at the age of ten years came to this country with his parents, and in 1843 became a resident of Pittsburgh. Mr. Wm. H. Bown was born in the Iron City in 1847 and has never lived in any other place.

Both these gentlemen are thoroughly conversant with every detail of the business in which they are engaged and the requirements of the trade in this locality.

THOS. A. CAIN,—*Fine Boots and Shoes, Fifth Avenue and Market Street.*

Prominent among the retail houses of the Smoky City, in the Boot and Shoe Line, is that of Thos. A. Cain. It was at first founded forty years ago by H. P. Cain, and continued by him twenty-two years. At the expiration of that time he was succeeded by T. A. Cain, the present proprietor. The house was originally started in a small way, but through the tact and high business qualifications of the founder, as well as his son, the present proprietor, his trade has largely increased, and he enjoys to-day the patronage of most of the leading families and merchant princes of Pittsburgh, transacting the largest retail business of any house in this line. Mr. Cain occupies the entire three-story brick building, 18x40, at the corner of Fifth Avenue and Market street, employing nine assistants, and carrying the most complete and varied stock of fine goods to be found in the city. His trade is largely in the cities of Pittsburgh and Allegheny, but he numbers among his regular customers many of the leading citizens of the principal towns within a radius of two hundred miles. Mr. Cain was born in Pittsburgh in October, 1839, and has been a life-long resident of the city, and for many years identified with the boot and shoe trade of his native place.

J. D. SHAW,—*Taxidermist, 235 Penn Avenue.*

The Art of Taxidermy is one that must commend itself to all persons of refinement and culture. As we observe the bright-winged inhabitants of the air flitting joyously by, we cannot fail to admire, and admiring, we wish for some means to preserve and perpetuate their beauties when Death shall have claimed them for his own and they otherwise would have mouldered away into nothingness. Those of our citizens who have visited our Expositions must have been attracted by the magnificent collection of birds and animals exhibited by that artist in his profession, Mr. J. D. Shaw. Mr. Shaw has been engaged in business for thirteen years, and at his present location for the past five years. Mr. Shaw can stuff anything on sea or land, from the tiny jeweled humming-bird that glances by like a thing of light, to the ponderous elephant from his native jungles in the East. All are alike to him, and so perfect and life-like are his specimens that we almost expect to hear the birds warble their sweetest songs. Mr. Shaw was born in England in 1827, and came to this country in 1852. His trade is scattered all over this section of country. He is the only person exclusively engaged in this business in the city. Mr. Shaw's work is all done to order. He preserves specimens of the feathered and animal tribes in a thoroughly satisfactory manner. He received a silver medal for stuffed birds and animals at the first Pittsburgh Industrial Exposition, at present located at 25 8th Street.

JACOB B. HUBLEY & CO.—*No. 195 Penn Ave.*

This House is undoubtedly the "Delamonic" of Pittsburgh and was established in the year 1824 by Mr. Rob't. Knox, with one barrel of flour given to him by a well-known steamboat man, on condition that said Knox would build an oven and furnish for each barrel of flour one barrel of crackers for the use of said steamboat man. The offer was accepted, and from that small beginning has the present well-known house grown. This house was first established on what is now known as First Avenue, near Wood Street. In 1831 the store was removed to more spacious rooms on account of increasing business. The present senior member of the house, Jacob B. Hubley, entered the old house at the age of nine years, and was a faithful assistant from 1834 until the death of Rob't. Knox, at which time he took charge of the business in his own interest. Alex. F. Hay, a prominent young business man, is the Co. In Dec., 1870, the business still growing and a more central location desired, the store was moved to its present place, the Library Hall Building, on Penn Avenue. This house is liberally patronized by the elite of the city, on account of its unsurpassed cuisine department. This spacious establishment is arranged in the most convenient manner, affording ample facilities for conducting business in a style and elegance equal to the most refined and modern to be found in this country, and also giving more satisfaction to the customers of the house. No expense has been spared in fitting up the rooms with rich and costly furniture and other appointments, to make the place both elegant and attractive. Their stock has been selected with much care, embracing every variety of confectionary and dainties.

We have also noticed that this house is always prepared to furnish promptly, on short notice, everything necessary for Weddings, Parties, Banquets, etc. Ice Creams and Ices, in exquisitely designed moulds, Jellies and Fancy Cakes, and ornamented Pyramids, of different kinds, of the most artistic finish known to the trade. They have superior provision made for supplying Breakfast, Dinner and Supper to Ladies, Gentlemen and Families, to order, of everything the market affords, in season. Their spacious Dining Parlor has a capacity for seating as high as 150 persons at once.

This popular establishment employs 20 hands, to assist in transacting the business. The furniture of the rooms is composed of black walnut, ground glass and marble, and the floor is laid in handsome mosaic.

Mr. Hubly is a native of Pittsburgh and has followed his business for upwards of forty years.

WALTER E. HAGUE,—*Gold, Silver and Nickel Plater, 138 Wood St.*

Mr. Hague was born in Sheffield, England, in 1841. He came to this country in 1864 and located in Pittsburgh in 1870, where he succeeded Mr. A. R. Nininger, who had then been engaged in the business for about one year, under the name and style of the "Pittsburgh Gold, Silver and Nickel Plating Works."

This line of business was at that time comparatively in its infancy, but, during the past nine years, Mr. Hague, by close attention to business, has succeeded in building up a trade which is second to none in the West. His factory, which is located on Virgin Alley, above Wood Street, is 30x120 feet in dimensions, and he gives employment to ten workmen, with an average pay roll of about \$100 per week. His office is at No. 138 Wood Street, and he does the largest jobbing business of any similar establishment outside of New York or Philadelphia. His trade is principally in Pennsylvania, Ohio and West Virginia. Mr. Hague is the inventor and originator of a peculiar process of electro-bronzing, which is understood by no other parties in the United States. He makes a specialty of Fire Iron Stands of elegant designs and superior workmanship, besides doing every description of work pertaining to his line. The quality of work turned out by Mr. Hague is fully equal, if not superior to that of any similar concern in this country or Europe.

FRANK ARMSTRONG,—*Coal Dealer, Cor. Fourth Avenue and Try Street.*

Energy and enterprise characterize the business of Mr. Frank Armstrong, successor to the Pittsburgh National Coal and Coke Co., situated at cor. Fourth Avenue and Try Street. It was commenced by the said company in 1864, and passed into the skillful management of Mr. Armstrong in 1876.

Fifteen men are employed at office and yard and another yard in the Sixteenth Ward requires eighteen to twenty men, with a weekly pay roll of \$1,500.

Mr. Armstrong deals in Pan Handle Coal, mined by the Consolidated Coal Mining Company, of Cincinnati, O. He also deals in Pittsburgh Coke, and keeps always on hand an abundant supply of Nut Coal and Slack. His yearly sales aggregate fully \$80,000.

Mr. Armstrong was born in the County of Tyrone, Ireland, in 1845, and came from thence direct to Pittsburgh in 1864. As a business man, he is considered among the foremost in our city. In social circles he is universally esteemed.

W. H. MIDGLEY,—*Groceries and Confectionery, No. 227 Penn Ave.*

The building now occupied by Mr. Midgley is one of the old familiar landmarks of the Smoky City, having been known as a Grocery corner for more than thirty years. It is located on what has been called the Connolly property for nearly half a century, and is familiar to every native Pittsburgher of the last generation. The first grocery store upon this site was established about 1840 by Mr. Connolly, who was succeeded by Paul and Gibson, they in turn by Mr. Strouse, followed by Midgley and Lesche, the immediate predecessors of the present proprietor. The building now standing upon this corner is a four story brick structure, 22x30, and is occupied by Mr. Midgley as a manufactory of Confectionery as well as dealer in every variety of fine Groceries, Choice Teas, Sugars, Coffees, &c. Mr. Midgley makes a specialty of Elaine, of which he sells large quantities. He employs two assistants and transacts a flourishing business. He has also been prominently identified with the oil interests in the oil regions for the past fifteen years.

E. H. MYERS & CO.—*Pork & Beef Packers, Nos. 217 & 219 Liberty St, cor. 7th St.*

It is well in recording the various industries of any community to give more than mere passing mention to those firms or men in any particular branch of trade who have achieved high positions through the force of native ability, unaided either by the capital of others or any influences, save those evoked by their own capacity. Such a firm is that of E. H. Myers & Co., the senior partner being a striking exemplification of what may justly be called a self-made man. A German by birth and an agriculturalist by occupation in that country, he came to this city without resources, at the age of 22, and after working some time at the very modest compensation even in those days, of \$10 per month, started a small grocery store on Wylie St., making this his first mercantile venture, 34 years ago. From its very inception success seemed to attend his efforts, and for nine years he remained in the same location, at the end of that time removing to No. 201 Liberty St., where as a wholesale grocer and jobber in Provisions, &c., he continued for five years more, annually increasing his capital and enlarging his connections and resources. At the close of this period he purchased the property at Nos. 217 and 219 Liberty street, and demolishing the old buildings with which it was encumbered, erected the structure now occupied by the House, being a four story edifice 40x58 feet, thoroughly adapted for the business in every way, and one of the most substantial and handsome buildings on this thoroughfare. As a pioneer in the meat and provision trade and as one of the first packers in this section of country, Mr. Myers discovered at an early date the profit of bringing meats from Chicago; but not content with this, and perceiving the advantages of that city as a base of operations in curing, packing and obtaining supplies, he bought three acres contiguous to the Union Stock Yards, and at an expense of \$103,000 built thereupon one of the most complete packing in houses the United States, 144x170 feet, with an L reaching back 194 feet and having a capacity of such extent as to make the slaughter of 2,500 hogs per day of no uncommon occurrence. Besides the building on Liberty street heretofore mentioned, which is the center from which all he business is conducted—four other large store houses, situated in convenient parts of the city, are used as warehouses for the storage of stock, and are during most seasons of the year taxed to their fullest capacity. As Pork and Beef packers and curers of choice Sugar Cured Hams, Shoulders, Dried Beef, Breakfast Bacon, as well as general dealers in Provisions, Lard, Cheese, Carbon and Lard Oils, etc., E. H. Myers & Co. stand at the head of the trade, not only in the magnitude of their transactions, but the excellence of all their products. Twenty men are employed by the house in this city, and six special agents resident in various trade centers of the country, assist in carrying on a business which has reached an average of \$700,000 per annum and steadily increasing. Mr. J. Stevenson, the Co., has no interest in the business, but retains one-third interest in the real estate situate at 217 & 219 Liberty street. This firm is indissolubly connected with the advancement of Pittsburgh and the development of its commercial and industrial resources.

A. W. CADMAN & CO.—*Brass Works & Foundry, Duquesne Way and Sixth St.*

This house was founded in 1860 by Cadman & Crawford, who carried on the business until 1869, when the firm became S. Cadman & Son, under which style it was continued until 1877, when Mr. A. W. Cadman became sole proprietor. The business conducted by this house is that of brass manufactures, Pipe Fitters and dealers in Brass and Iron Fittings for Steam, Water, Gas and Oil, manufacturing and repairing light machinery in brass or iron, and making to order castings in Iron, Brass, Bronze or Soft Metals. They occupy the large two story brick structure, corner of Duquesne Way and Sixth street, 38x125, employing ten hands and using one ten-horse power engine. Their business, which extends throughout the country within a circuit of two hundred miles, now amounts to about \$20,000 per annum, and will compare favorably with any similar establishment in the Smoky city. Mr. Cadman is a native of Pittsburgh, a thorough practical mechanic and workman, having followed the business for the past fifteen years.

KRAMER & SEIFERT,—*Oysters, Yeast, Dried Beef, &c., cor. Penn Av. & 8th St.*

This well known house was established in 1870, and at that time was devoted exclusively to the introduction of Fleishman's Compressed Yeast, at various times since other branches have been added to the trade which now embraces Fresh Cut Dried Beef, Oysters (arrow brand), Jellies and canned goods generally. Beginning with limited resources and but one horse and wagon, the firm now employ numerous assistants, besides five wagons, which barely suffice to supply the 680 retail grocers of the city and environs, who require constant supplies. As a branch of industry the trade in fresh cut dried beef has assumed proportions that are increasing daily under the management of this firm, who carefully cure, and prepare it by rejecting all fat, bone or superfluous matter, pack in half pound packages, which, if not disposed of by the retailer while fresh are returned, and exchanged for that which is.

In oysters, canned goods and sardines the business is constantly enlarging, and to those at home or within the range of our commerce, who deal in these commodities, this house is cordially recommended.

AIKEN & WALLACE,—*Produce Commission Merchants, 185 Liberty St.*

Liberty Street seems to be, at the present time, the general headquarters for the produce business in Pittsburgh, and the amount of trade in this line annually transacted upon this thoroughfare, forms a large and important item of the commerce of the Smoky City. Prominent among the business houses engaged in this line of business, we may mention that of Messrs. Aiken & Wallace, at No. 185 Liberty Street. The members of this firm are Mr. John Aiken and Mr. John Wallace, who have been associated in business since 1871, under the firm name and style above given. Mr. Aiken had, however, been engaged in business for himself for eight years previous to that time. They occupy the large three-story brick warehouse, 22x110, at the number named, with basement, and transact a business averaging \$75,000 per annum, giving employment to four assistants, and dealing in every description of Country Produce, making a specialty of Potatoes, Sweet Potatoes, Foreign Fruits, etc. These gentlemen pay particular attention to consignments from abroad, and guarantee prompt and satisfactory returns. Mr. Thomas E. Renton is book-keeper for the firm, and is a gentleman thoroughly qualified for the position which he occupies. We can vouch for the high reputation and unquestionable integrity of this House.

WEILER BROTHERS,—*Wholesale Liquors, No. 159 First Ave.*

The wholesale Liquor house of Weiler Brothers was established in 1871 by the present proprietors, with a capital of \$5,000. They are distillers' agents for Manogahela Rye Whiskies and importers and dealers in Wines, Gins and Brandy. They carry a stock of fine goods, valued at from \$9,000 to \$10,000, and their trade, which is distributed through Pennsylvania, Ohio and West Virginia, amounts to about \$40,000 per annum. They have no particular specialty, except the general excellence and purity of all liquors handled by them. The members of the firm are Mr. E. Weiler, who was born in Germany in 1842 and came to the United States in 1855, and Mr. A. Weiler, born in the same place in 1845 and a resident of the United States since 1858. The trade of this house is steadily increasing throughout the United States.

W. P. TOWNSEND & CO.—*Rivets and Wire, 19 and 21 Market St.*

The above House was founded in the year 1816 by Rob't. Townsend, father of the present head of the firm. The present firm, however, consists of W. P. Townsend and his two sons, Chas. C. and Edward P. Townsend. The business was commenced in a very small way and has always been conducted within the family since its foundation, some sixty-three years ago. The firm employ thirty hands, with a pay-roll amounting to \$2,000 per month. The building consists of a warehouse and office, being a brick structure three stories high, 40x70 feet. The factory of the firm is located at Falletton, on Beaver River, and is 50x300 feet, substantially built of brick and stone. The motive power is supplied by turbine water wheels, with ample steam power that can be substituted in time of low water. The capacity of these works is one thousand tons of finished work per annum. The Rivet Department is not surpassed, nor perhaps equalled, in this country. The productions of the House find a ready sale all over the United States. The members of the firm are all natives of Pennsylvania.

PITTSBURGH SHOW CASE CO.—*54 Ninth St.*

The office and warerooms of this company are located at No. 54 Ninth Street, and their factory, which is 34x75 feet in size, on Grant Street. Their salesroom is 20x30, and they have a fine stock of elegant German Silver and Walnut Show Cases of French Plate and American Glass, at prices ranging from \$8 to \$50. The members of the company are Mr. T. McNulty and Mr. Wm. Frieberthauser, with a capital invested of about \$9,000. Their trade, which is principally in Pennsylvania, Ohio and West Virginia, amounts to about \$14,000 per annum. The company was founded by Mr. McNulty in January, 1878. He had for eight years previously been in charge of one of the largest show case establishments in the city and is a thorough, practical workman in that line of business. Mr. Frieberthauser, who is also a practical workman, purchased an interest in the concern in March, 1878, since which time it has been conducted successfully by these two gentlemen, who do a safe, cash business and stand well financially.

A. LYONS & CO.—*Citizens' Oil Works, Cor. Seventh St. and Duquesne Way.*

The "Citizens' Oil Works" was originally established as an incorporated company, but are now owned exclusively by the above-mentioned firm, and, under their management, the business has largely increased. The works, which are located at the corner of Butler and Bridge Streets, on the line of the Allegheny Valley Railroad, cover an area of more than seven acres and furnish employment to about two hundred hands. They are divided into three departments, as follows: Paraffine Wax Works, Barrel Manufactory and Carbon Oil Refinery. The machinery employed are eight engines, twelve force-pumps and two batteries of boilers, in addition to the smaller machinery required. The capacity of the works is 350 barrels of paraffine wax per month, the largest production of any works in the country, with a single exception. Ten thousand barrels of refined oil per month, while the barrel manufactory turns out from twenty-five to thirty thousand packages every month. The packages or barrels manufactured by this firm are noted for their tightness, the percentage of leakage being much less than that in packages of other manufacturers. This fact is corroborated by official statistics and is an important item to be considered by dealers and shippers. The various productions of this house are all exported to Europe, England being the principal depot. The annual business transacted by this House reaches an enormous amount, as will be seen from the extent of their productions. Both members of the firm, Mr. A. Lyons and R. Hemmick, have been residents of Pittsburgh for many years.

P. S. WEISENBERGER & CO.—*Keystone Varnish and Japan Works,* *Office, No. 2 Duquesne Way, Pittsburgh; Factory, Main St., Allegheny.*

As a comparatively new branch of industry in this community, the enterprise of the above firm deserves more than passing mention. Established but three years ago, the business has already grown from the limited amount of \$3,000 sales per annum to \$10,000, and is rapidly increasing.

For the following grades of varnish this house has already established a reputation that carries with it a guarantee of the excellence of their manufactures: Black Baking Japan, No. 1, for Japanners, Stamping Companies, etc.; No. 2, for Iron Founders and Manufacturers of Hardware; Asphaltum Self-drying Varnish, for Carriage Makers, etc.; Cotton Tie Varnish; Turpentine Japan Dryer; Benzine Japan Dryer; with Special Varnishes, expressly for Trucks, Wagons, Furniture, etc., etc. Already these goods find a ready market, not only in our own State, but in West Virginia, Ohio, Western New York, Illinois, Indiana, Missouri and other States.

A thorough knowledge of the business on the part of Mr. Weisenberger and his partner, Mr. H. Paddock, insures a product that will compare favorably, if not surpass in quality that of the largest Eastern houses, while the liberal and prompt way in which the concern is conducted, speaks in the highest terms of the estimation in which the firm is held by its customers and the public at large.

WM. GRABOWSKY,—*Silk Hat Manufacturer, No. 233 Penn Av.*

This House was established in its present location four years ago by Mr. Grabowsky, who is a practical Hatter and Manufacturer of many years experience. He occupies the three-story brick edifice at No. 233 Penn Avenue and employs three skilled and experienced workmen, transacting a business of about \$3,000 per annum, and carrying an average stock of \$2,000. He manufactures silk and felt hats extensively for the trade, supplying many of the principal dealers in the city, besides carrying on a large retail business, selling Fine Hats, of every description, at wholesale prices. His specialty is in Cleaning, Repairing and Renovating Hats, and Relining and Making-over Ladies' Furs.

Mr. Grabowsky was born in Hamburg, Germany, in 1853, and came to the United States in 1873. By his thorough knowledge of the trade, strict attention to business, and unimpeachable integrity, he has built up a business which is eminently gratifying and satisfactory and is steadily increasing. This House does not solicit work outside of its office—all parties, therefore, soliciting work for this House, are imposing on the public.

J. M. HOFFMANN & CO.—*Pianos and Organs, No. 141 Smithfield St.*

Although this firm was established as recently as 1878 in its present location, Mr. Hoffman has been for many years identified with the musical instrument business of Pittsburgh and is widely and favorably known in the musical community. They are sole agents in Pittsburgh for the celebrated Lohmer & Co. Pianos, Jubilee Organs and other reliable makes, besides keeping a line of Musical Instruments, such as Guitars, Violins, Flutes, Accordions, Strings, etc., of every description. They occupy three floors, 25x90, at No. 141 Smithfield Street, between Fifth and Sixth Avenues, and carry a stock of about \$10,000 to \$12,000. Owing to their extensive acquaintance and well-known reliability, they do a large and flourishing business in the two cities and surrounding districts.

VOWINKEL & BIVENOUR,—*Wholesale Liquor Merchants, 27 Wood St.*

This firm was established in August, 1878, and already ranks as one of the representative business houses of the Smoky City. Mr. Vowinkel, the senior member of the firm, has been a resident of Pittsburgh for the past five years, and his partner for nearly double that time, during which period both gentlemen have established an enviable reputation for industry, probity and fair dealing.

They occupy three entire floors of the large and commodious warehouse No. 27 Wood Street, with a full and complete assortment of the purest and choicest Brandies, Whiskies and Wines to be found in the West. At present they carry a stock of about \$10,000 worth, and their trade is constantly increasing. While the principal portion of their business is in Pittsburgh and its immediate vicinity, they employ traveling salesmen through the Western portions of Pennsylvania and Eastern Ohio, where their particular specialties of Pure Rye Whiskies and California Wines have already become famous. This firm employs three men in their warehouse, in addition to the force upon the road, and as they deal exclusively in the best and purest of Foreign and Domestic Wines and Liquors, dealers throughout this section may at all times be assured of procuring the very best articles in the market and at reasonable prices.

JOHN CRAWFORD,—*Stencils, Steel Stamps, Rubber Stamps, &c., 184 Liberty St.*

It is rare to find one engaged in a business of this kind so thoroughly adapted to its requirements in every particular as is Mr. John Crawford. He has not only become familiar with every feature by close study and application, but is gifted with a natural talent of ingenuity which is higher and more essential than all the rudimentary instructions of the work shop. Possessing these native qualifications and skill, with careful study and experience he is capable of a greater variety and more perfect workmanship than could possibly be executed without them. His facilities for the manufacture of Stencils, Steel Stamps, Rubber Stamps, Burning Brands, Seals, etc., are unsurpassed, and come directly in the line of the requirements of every manufacturing establishment and business man. No establishment in this or any other city can produce better work nor at more reasonable rates. He also does Engraving, and manufactures Steel Dies, Notary Public and other Seals for Lodges and Societies, Hotel and Railroad Checks, Key Tags, Flour Brands, and deals in Stencil Inks and Brushes. His establishment, though second in size in the city, is not second in point of excellence of workmanship and promptness of execution. His place of business can be found at No. 184 Liberty Street, where he carries a stock of about \$1,000, keeps two assistants, and is favored with a good and gradually increasing trade. The business was first started in April, 1878, and while his trade is chiefly confined to Pittsburgh and Allegheny City, it is gradually extending through Western Pennsylvania and Ohio. Mr. Crawford is a native of this city, having been born here in 1833, and has, since coming to the age of manhood, always done business in this city. We cheerfully commend him to the favorable consideration of those desiring anything in his line.

A. HAMILTON,—*Fish, Oysters and Game, 184 Liberty St.*

This excellent and popular depot for Fish, Oysters and Game, is ably and efficiently conducted by Mr. A. Hamilton at 184 Liberty street, where he keeps a stock constantly on hand in their season, which will tempt the epicure and attract the notice of dealers in the city and surrounding country. In 1878, Mr. Hamilton took possession of this store as successor to R. J. Edie & Co., and by his industry and excellent business qualifications has built up and increased the business very materially. He does both a wholesale and retail business, extending over the city and surrounding country, and will always be found prompt in filling orders for anything in his line. In Oysters he makes a specialty of the "Signal" brand, the choicest Baltimore Oysters. He also deals in Fish and Game, in its season, Canned Goods, Pickles, etc. He employs three hands, and keeps one wagon running for delivering goods and shipping. Under his energetic management his trade will continue to widen and increase, from year to year, both at home and abroad.

LOUIS MOESER,—*Notary Public, Ship Agent, etc., 142 Smithfield St.*

Mr. Moeser was born in Germany in 1846. He came to this country in 1869 and to Pittsburgh the same year. In 1872 he opened an office as General Steam Ship Agent and is the oldest resident agent in the city for the "American" and "Red Star" lines. He also represents the North German Lloyd, Hamburg-American Packet Co, and nearly all the European Steamship Lines, and transacts a large European Banking, Exchange and Collection business, furnishing Drafts of any required amount on the principal and most reliable bankers in the old world. His office is 12x29 feet in size, and Mr. Moeser has every facility for transacting business and imparting information relative to the sailing of steamships, price of passage and exchange of foreign money. He also transacts every description of Notarial business, being duly commissioned by the Governor of Pennsylvania as Notary Public. His business is principally in Pittsburgh and Allegheny County, and is as large as that of any other agent in the city.

O'BYRNE BROS.—*Publishers and Book Binders, 143 Wood St.*

This House, though established as late as 1874, has given marked evidences of vitality in the rapid increase and general character of its business. Founded by M. A. and J. J. O'Byrne, the firm have made specialties of certain standard and invaluable works, among which may be mentioned the Encyclopedia Britannica, the Encyclopedia of Chemistry, Picturesque Ireland, and other standard publications, such as Family Bibles, various elegant editions of the Poets, Histories, etc.

Already the business of the firm, through the employment of twenty to twenty-five salesmen and canvassers, extends not only throughout Western Pennsylvania, but several adjacent States, and gives ample evidence that its operations are conducted upon strict business principles and with a view to the establishment of a large and permanent concern. The Messrs. O'Byrne have been residents of this city for about five years, and have, in that comparatively short period, not only built up a large and growing industry, affording employment for a numerous corps of assistants, but have acquired a reputation for thrift and integrity upon which any firm might be justly congratulated.

L. H. SMITH & CO.—Stoves, Grates, &c., No. 49 Sixth St.

The beauty of style and finish of the celebrated Wellman's Reflector Stoves and Grates, manufactured by Messrs. L. H. Smith & Co., at No. 49 Sixth street, has added another laurel to Pittsburgh's reputation as headquarters for novelties in the iron and glass line. The marbleized Slate Mantels on exhibition at this establishment are also models in their way, and most beautiful specimens of that description of work. This House also deals in Chilson's New Cone Furnaces, Hot air Registers, Ventilators, Common Grates, Fronts, &c. This house was established in 1869 in a comparatively small way, but to-day they stand prominent among the leading establishments of this kind in the city for fine work, and their sales now reach a large and very satisfactory sum. They occupy the three story warehouse, 22 by 87, at the location above named, employing fifteen assistants, and carrying a large and elegant assortment of the above mentioned goods and all articles pertaining to this line. Their marbleized mantels range in price from \$15.00 to \$150.00. Their trade is principally located in the two cities, although they ship many articles to the various towns of Western Pennsylvania, Eastern Ohio and West Virginia. Mr. L. H. Smith is a native of Pittsburgh. He is a business man of high standing and undoubtable integrity.

GROGAN & MERZ,—Jewelers, Cor. Fifth Avenue and Market street.

This house was established in a comparatively small way, 35 years ago, by Alex. Richardson, and from him it was passed to his brother, H. Richardson & Co., who were afterward succeeded by L. McIntosh & Co., who were in turn succeeded by the firm who occupy the building at present. The increasing demand for artistic and strictly choice goods in their line has prompted them to keep on hand an unusually large stock of the same. They strive to keep a choice assortment of goods, from which may be chosen, at any time, beautiful and appropriate wedding and holiday gifts; at this house at all times may be found carefully selected Diamonds of first quality, handsomely mounted, a rich assortment of Cameos and Intaglios, Locketts, Watches, Chains, &c. Their business will amount to \$50,000 per annum. Their building is a spacious three story brick, 22x60 feet. In order that their business may be attended to promptly, they employ five hands, and their pay roll amounts to about \$250 per month. The trade of the house is principally in and near the city. Mr. J. C. Grogan is a native of Pittsburgh, and is a practical and punctual business man. Mr. Merz, a German by birth, is a competent and practical Watchmaker and Jeweler. This house in every respect, is certainly one of the leading houses in its line of goods in our city.

F. G. PAULSON,—Fashionable Hatter, 113 Wood St.

It is an incontrovertible fact that there is no article of personal attire which so directly affects the appearance as that of hats or caps, and in the connection we desire to call attention to the Fashionable Hat, Cap, and Fur House of Mr. Frank G. Paulson, situated at No. 113 Wood street. This is one of the oldest business houses in the city, having been started by the Hon. C. H. Paulson in 1836, and conducted by him with uniform success up to 1875, when it came into the hands of the present proprietor. This House has long been HEADQUARTERS for the best styles and qualities of goods in this line, as the former proprietor, Hon. C. H. Paulson, has long been associated with the business interests of the city and identified prominently with politics, state and national affairs, giving him an extended acquaintance and general popularity. He was elected State Senator for the 44th District of Pennsylvania in 1878, which position he still occupies. Under the present management, this store will lose none of its attractive features in point of stock, style or qualities of goods, nor in the ability of its management. It still continues to be the leader in Hats and Caps, and for the Fall and Winter trade a fine display of elegant Furs is always to be found at 113 Wood street. Mr. Frank G. Paulson is a son of Hon. C. H. Paulson, and has been long enough associated with the business and with the people of Pittsburgh to establish for himself an enviable reputation as a gentleman and enterprising business man. He carries a stock always complete in point of variety and styles, at prices always lowest for the quality. Occupying three floors of an ample building, the first floor being used as a sales room.

WEBSTER GRAY & CO.—Importing Tailors, No. 191 Penn Ave.

As a firm of the oldest standing in this community, and one closely connected in its history with the progress and development of trade in Pittsburgh, the house of Messrs. Webster, Gray & Co., is entitled to more than passing mention in this publication. Founded nearly half a century ago by Samuel Gray, Esq., the firm has always been recognized as occupying the very highest position, and maintaining it by the superior character of its work and the signal intelligence of its management. In 1866 Mr. Webster Gray was admitted to an interest in the concern under the above style, and by the demise of Saml. Gray, Esq., his father, has in turn become the senior representative of the house. Dealing with the highest class of custom, this trade has been strictly maintained by the direct importation of the finest grades of foreign goods, and the employment only of those who are most thoroughly skilled as workmen and cutters. As contributing in no small degree to the industries of the city, this concern employ not less than 25 hands and at times considerably more. The establishment is perhaps the most *recherche* in Pittsburgh, and is the resort of those whose taste demands the very best that can be procured, at prices that are now considered almost fabulously low. In style, make, quality, and all those points that are absolutely essential in a perfect suit, this house is unsurpassed, while its experience and general character is the highest guarantee of satisfaction in every respect.

JOHN WANAMAKER & CO.—Clothiers, 29 Fifth Avenue.

For a long series of years the House of Jno. Wanamaker & Co., Philadelphia, discovered that they had acquired a very considerable trade in this city of such a class as to warrant them in sending two or three men here several times annually for the purpose of taking orders. Gradually, however, as the character of this House and its work became better known, the demand for its goods became too large to manage in this way, and in April, 1878, therefore, the present splendid establishment was opened at No. 29 Fifth Avenue, as a branch of the Philadelphia House, and has since done a business commensurate with the standing of the firm and the enormous stock of goods carried.

In the various departments of Custom Work, Merchant Tailoring, Men's, Youths' and Boys' Ready-made Clothing, Rubber and Furnishing Goods, etc., this House has acquired a reputation perhaps unequalled in the United States, for cheapness, variety, excellence, and perfectly-fitting, well-made garments.

Occupying a building four stories in height, 23x100 feet, and employing nine salesmen, the establishment in every appointment and facility is regarded as being the finest and most extensive in the city.

Mr. Nicholas Baggs, who manages the business of this branch, has been for many years connected with the firm and thoroughly understands the liberal and enterprising spirit that characterizes all the operations of this House. Having vested so large an interest here, the Messrs. Wanamaker regard themselves so much citizens as to be vitally concerned in every movement that affects the prosperity of this community and are justly entitled to the high position they have achieved for themselves by the exercise of integrity and the extraordinary commercial sagacity with which they are endowed.

BERKSHIRE LIFE INS. CO., of Pittsfield, Mass.**Geo. W. English, General Agent, No. 67 Fourth Ave.**

The Berkshire Life Ins. Co., is known as one of the oldest in the United States, being chartered in 1851. It has accumulated assets to the amount of \$3,400,000 and affords all the security and advantages to the insured that can be obtained from any similar first class institution. An agency for this company was established in this city nine years ago, and in January 1878, Mr. Geo. W. English took the general management of this district, and the various sub-agencies throughout Western Pennsylvania and bordering States. Mr. English was born in the central part of this State, coming to Pittsburgh in 1870, where he was identified with the press for many years. He employs three solicitors, and brings to his work an adaptability and energy that already have a decidedly beneficial effect upon the business of the company in this section, and must produce results of reciprocal advantage to all concerned.

BEYMER, BAUMAN & CO.—Prop'rs Standard White Lead Works,**Office No. 42 Fifth Ave., Works, Pennsylvania Ave., Allegheny City.**

Messrs. Beymer, Bauman & Co., have done much in giving creditable character to this class of Pittsburgh manufacturers, their products being sold in every State of the Union, East of the Rocky Mountains, and are universally recognized for chemical purity and other points of excellence. Established in 1867 with a capital of \$250,000, the business of the firm has reached \$400,000 annually. The works in Allegheny City cover an area of 1½ acres, and being supplied with the finest machinery and every late approved appliance, produce from about 6 to 7 tons of Lead daily with a capacity of 3,000 tons per annum, employ 40 hands, requiring a weekly disbursement of over \$400, besides, which six assistants are required in the clerical departments and on the road. The members of the firm S. Beymer, R. F. Bauman and C. F. Wells, are all residents of this city, having been closely identified with its interests for over 25 years and are at present influentially connected with many of our largest and most important commercial and financial institutions. With the determination of manufacturing a faultless article of white lead, this house has achieved its object. From all sources endorsements are received, touching its perfect freedom from all foreign ingredients. The highest official authorities of the United States Navy made a special report June 7, 1878, announcing that after the most thorough tests, it was ascertained that the White Lead of Messrs. Beymer, Bauman & Co., "was strictly pure without trace of silver, antimony or other alloy, of perfect whiteness, and under the same conditions covering ¾ per cent. more surface than the best lead heretofore known to the department." As manufacturers of Red Lead, Orange Mineral and Pottery's Lead, the firm are equally successful.

C. F. WELLS & CO.—Pennsylvania White Lead Works,**Works, River Ave., Allegheny City. Office, No. 42 Fifth Ave.**

One of the oldest in the State. These works were established 35 years ago by B. A. Falmestock, succeeded subsequently by Falmestock, Hazlett & Schwardt, and acquired finally by the present proprietors in 1875. The works are situated in Allegheny City and rank only second in size and importance to any in the country. They cover ¾ of an acre, with a producing capacity of 1,500 to 2,000 tons annually and are furnished with steam engines, boilers and all the latest and best machinery used in the manufacture of White Lead. Thirty hands are employed at the factory and four clerks and salesmen in other departments, entailing an outlay of not less than \$350 per week. The vested capital is \$125,000 and the business amounts to \$250,000 annually.

The members of the firm are Messrs. C. F. Wells, S. Beymer, R. F. Bauman and Wm. Steinmeyer, men of public enterprise and spirit. The trade of the House extends to all parts of the country, and its product is highly esteemed for its unvarying purity and long established reputation for general excellence. This House stands second to none, and enjoys, in a marked degree, the confidence and respect of those with whom they establish business relations.

ROBISON BROTHERS,—Coal Merchants,**Foot of Seventh Street, Pittsburgh, and Anderson St. & River Ave., Allegheny.**

The history of the four young men composing the above named firm furnishes an admirable illustration and lesson, of what may be accomplished by indomitable energy and perseverance. In 1872 the four brothers, Robison, embarked in the coal business with almost boundless means and unlimited credit. Their father, during a busy and most successful career, had accumulated a fortune, but died during the year, leaving to his sons six hundred acres of coal lands with a mine in successful operation, over sixteen hundred acres of valuable land in the oil regions, and cash and bank stock to the amount of a million dollars or more. He had handled in one year 1,800,000 bushels of coal, in addition to an extensive pork packing and grocery establishment, and been considered one of the solid men in Pittsburgh. But the panic came, and in a single season they saw the wealth, accumulated by so much labor and difficulty by their honored parent, swept away, and for a time it seemed a complete financial annihilation. Possessed of stout hearts and iron wills, they struggled on to recover their lost prestige and to achieve for themselves the same success which had signalized their father's business career. To their credit be it said, that to a certain extent they have succeeded, and give evidence that they are made of the metal which is purified and strengthened by trial. They have now several oil wells in successful operation, and an extensive coal mine on the Monongahela, from whence they receive their supplies. They are prepared with ample facilities to deliver to any part of Pittsburgh or Allegheny. In 1876 they met with a loss of sixteen coal boats and other coal property, amounting in value to over \$15,000, but in spite of all these reverses they are undaunted, hard working, energetic business men, in whose "lexicon there is no such word as fail."

JOSEPH R. HUNTER,—Merchandise Broker, 265 Liberty St.

Not only is Mr. Hunter widely esteemed and respected as a business man of energy and integrity, but as a prominent worker and leader in the temperance cause he stands preeminently conspicuous. As president of the "Old Home" branch of the Young Men's Christian Temperance Union for the past two years, and a prominent advocate of temperance since the commencement of the "Murphy movement" in the Winter of 1876, Mr. Hunter has done most effective service and won for himself the gratitude and esteem of thousands. He was born in Mercer county, Pennsylvania, in 1825, but has been a resident of Pittsburgh for twenty-eight years, during which period he has been actively engaged in mercantile pursuits and identified with the grocery trade of this city. Nine years since he established his present business, in which he has built up a large and flourishing trade among the wholesale grocers of Pittsburgh and Allegheny City, with whom his business is exclusively conducted. The lines of goods principally handled by Mr. Hunter are Coffee, Sugar, Rice, Lard, Oil, Soaps, &c. Over 25,000 bags of Coffee are represented at his office by sample, and other goods in proportionate quantities. The aggregate amount of sales transacted through Mr. Hunter is not less than \$1,000,000. He represents all the leading sugar refineries and heavy importing houses of the East.

PITTSBURGH & CONNELLSVILLE COKE CO.

Office, No. 83 Wood St., Works at Connellsville, at which point all sales are made.

So extensive is the coal interest and so thoroughly identified with Pittsburgh, that a notice of the prominent dealers is highly essential. Among such organizations none is deserving of more prominent and copious mention than the Pittsburgh & Connellsville Coke Co. Incorporated under the mining and manufacturing laws of Pennsylvania in 1864, with a capital stock of \$150,000, the concern at once took rank among the largest and most energetic producers in the country. The present officers, who have been connected with it from its inception, are Messrs. J. M. Bailey, Prest., John Wilhelm, Jr. Sec'y., and John F. Dravo, Treasurer and General Manager, to whose ability and thorough knowledge is due its signal success. The possessions of the company are mainly located near Connellsville in Fayette county, and consist of 300 acres of the finest coal property in Pennsylvania, in which numerous shafts are sunk and mines operated, four powerful engines and seven boilers, extensive hoisting and pumping apparatus, and machinery for elevating coal through the shafts, besides ovens, for converting it into coke, the greater part of the production being thus used. Five hundred and twenty men are employed in these various operations, requiring an average monthly disbursement of about \$7,500. The excellence of the production is recognized by iron manufacturers all over the United States, and the State Secretary of Internal Affairs, in his report on Industrial Statistics, Vol 3, 1874-5, says that "the Pittsburgh Coal Seam," in which the mines of the company are located, "is from six to ten feet thick, containing an excess of bituminous matter, and yielding a large percentage of excellent coke." For the manufacture of illuminating gas, this coal is considered unequalled, and the coke of this company manufactured from the Connellsville Vein finds a ready market, not only at home, but is consumed in large quantities both in Eastern and Western States, the annual sales which are all made at the mines, amounting to \$105,600, and increasing even under the present reduced price of the product. Few men in this community are more widely known than Mr. Jno. F. Dravo, a native of Westmoreland Co., Pa., where he was born in 1819, he came to Pittsburgh at an early age, and for nearly half a century has been conspicuous in promoting the commercial and industrial welfare of this city. Active in every public undertaking, Vice President of the Chamber of Commerce, Vice Pres't and Director of the Morganza Reform School and intimately connected by preference and principle with other organizations, tending to enhance the general good, a fluent writer and forceable speaker, Mr. Dravo has justly earned the respect and consideration in which he is held. The organization with which he is most identified, has arrived under his management at a productive capacity of 25,000 bushels per day, and takes rank at the present time with the largest enterprises of the kind in Pennsylvania.

JOS. R. HUGHES,—Wall Paper, &c., 107 Market St.

Mr. Hughes has been actively engaged in business since 1848, and in his present location since 1860, during which time his trade has steadily increased, until it now reaches the handsome sum of \$25,000 annually. He occupies three stories of the building, No. 107 Market street, near Fifth avenue, employing five assistants and carrying an average stock of about \$20,000 in value, embracing every variety of fine Wall Paper, Dados, and Window Shades, and all articles pertaining to this line of business. His trade is principally in the two cities and the adjacent counties. Mr. Hughes is a native of the Smoky City, and well and favorably known as a citizen and as a business man of undoubted integrity and reliability. To all classes of customers, this House can always offer inducements not excelled by any other House in Pittsburgh.

JAS. LOUGHRIDGE,—Brush Manufacturer, &c., No. 171 Smithfield St.

A notice of all important branches of business of this city of the present day, is of interest to all, and essential to a complete history of the progress and growth of the community for the information and instruction of the present as well as coming generations. The establishment now owned and carried on by Mr. James Loughridge, was founded in 1854 by Loughridge and Maxwell, and in 1861 the present proprietor assumed the entire management and control of the business. He carries a stock at the present time valued at from \$8,000 to \$10,000, consisting chiefly of Brushes, Children's Carriages, Looking Glass & Picture Frames, etc., and transacts a business of not less than \$15,000 per annum. He manufactures nearly every article in stock, his specialties being Brushes of every description and Children's Carriages. He is patentee and sole proprietor of a patent oscillating spring front for children's carriages, which is a great improvement upon anything heretofore in use. This is the only manufactory of children's carriages in the city, and in that line Mr. Loughridge enjoys a large and lucrative business. At present he employs but four hands, but at times the force is largely increased. Mr. Loughridge was born in the city of Baltimore, Md., in 1829. He came to Pittsburgh in 1846 and learned the trade of brush maker in this city. His establishment is noted for the excellent quality of Brushes manufactured, and his trade throughout the city and surrounding country is correspondingly large. Machine brushes of every kind are made to order in the most thorough manner.

H. REINEKE & CO.—Gas & Steam Fitters, No. 61 Wood St.

Some ten years since, the firm of Wallace, Caritt & Co., dealers in Chandeliers, Gas Fixtures, &c., was established in Pittsburgh. These gentlemen were succeeded by Messrs. Reineke & Wilson, and in 1878 the firm name and style was again changed to H. Reineke & Co., P. A. Reineke & J. P. Reineke being admitted. The senior member of the present firm is a native of Germany, but has resided in the Iron City for the past thirty-five years. The junior partners are both natives and life-long residents of Pittsburgh. They occupy the first floor and basement of No. 61 Wood street, extending back some one hundred feet, which is divided into sales and mechanical departments. Their business is both wholesale and retail, and they carry a stock complete in variety and excellence, consisting principally of Chandeliers, Steam and Gas Fixtures, Lift and Force Pumps, Iron and Lead Pipe, Brackets, &c. Their trade, which is principally in the two cities and immediate vicinity, amounts to about \$20,000 annually. In their manufacturing department they employ from four to eight workmen, and make a specialty of re-bronzing and gilding Chandeliers, &c. The members of the firm are practical plumbers and gas fitters, and give their personal attention to the various departments of their extensive business.

JAMES McKEE,—Watchmaker and Jeweler, No. 13 Fifth Ave.

Mr. McKee is a thorough practical Watchmaker and Jeweler of more than fifteen years experience, is a native of Pittsburgh, learned his trade in the city and has resided here all his life. He commenced business for himself June 1st 1877, at his present location, No. 13 Fifth Ave., his annual business now amounting to about \$5,000. He occupies the three story brick building, 15x15 feet in size, employing four assistants, carrying a small selected stock of Watches, Clocks and Jewelry, making a specialty of fine watch and clock repairing, in which he does a very large and flourishing business. He numbers among his customers many of the leading citizens of Pittsburgh, Allegheny and the country within a radius of fifty miles in all directions. He employs only careful and experienced workmen and his prices for repairing are lower than any other establishment in the city.

R. G. DUN & CO.—*The Mercantile Agency, 63, 65 & 67 Fourth Av. A. B. Wigley, Man.*

It would be almost impossible to write an account of the commercial and industrial history of this city without making frequent reference to the Mercantile Agency of R. G. Dun & Co. Founded by Lewis Tappan & Co., in New York in 1841, a branch office was opened in Pittsburgh in 1852, and through all the financial and mercantile mutations that have convulsed the whole country during this extended period the institution to which illusion is made, has remained unshaken and practically unchanged, save in its growing range of usefulness and more substantial position.

As a subtle, permeating moral force to restrain evils and correct abuses in the commercial community, it would be hard to overrate the utility of this agency, whose operations in this country are only limited by the bounds of civilization. The territory over which the Pittsburg office has special jurisdiction includes a large portion of Western Pennsylvania, Eastern Ohio and Western Virginia, but is, of course, connected with every other office in the United States and Canadas by daily communication by mail and telegraphic cyphers.

The resident manager, Mr. A. B. Wigley, has been in charge of this office for three years, previously occupying the same position at Toledo, O., and Louisville, Ky. His efficiency as an agency man has never been questioned and his management of this branch has been productive of the best results, both in the increase of business and promptness with which information is obtained and transmitted, as well as a general systematic thoroughness that redounds greatly to the benefit of all concerned.

The premises occupied by the establishment are at Nos. 63, 65 and 67 Fourth Avenue, Pittsburgh. They are ample in dimensions, and perfectly fitted and furnished throughout. A staff of fourteen clerks and reporters is required to conduct the business in its various departments, special attention being paid to the accumulation of facts from all parts of the United States with regard to the condition and financial standing of those engaged in the Iron, Glass and Crockery trades. Messrs. R. G. Dun & Co. claim to be the oldest and largest mercantile agency in the world, and it is generally understood that no one has had the temerity to dispute or contradict this assertion; in any event, the position this institution has gained in the esteem of the intelligent business public, is a sufficient guarantee of its necessity and undoubted importance for the protection of commerce and trade and manufactures.

J. M. HARTFORD,—*Wholesale Auctioneer and Commission Merchant, 109 Wood St.*

Regular trade sales of Boots, Shoes and other Merchandise have long been in vogue in the Eastern cities, but it was reserved for Mr. J. M. Hartford to inaugurate and popularize such a movement in the Smoky City. Mr. Hartford commenced business as a wholesale dealer in Boots and Shoes in 1872, and for about three years confined himself to that line of business. In 1875, he entered the field as a Wholesale Auctioneer and General Commission Merchant, since which time, notwithstanding the general depression in other branches of trade, he has steadily progressed, until his regular weekly sales have become one of the features of Pittsburgh, increasing trade and importance in a commercial point of view. Mr. Hartford occupies four floors at No. 109 Wood Street, with a branch office at No. 102 Pearl Street, Boston. At his Pittsburgh establishment he employs twelve assistants, and although his trade is principally local, large numbers of country dealers from the surrounding towns are attracted to the city by the inducements held out by him. His regular trade sales, to dealers only, are held on Wednesday of each week, and usually attract a large number of retailers and general merchants from the two cities and adjacent territory. Mr. Hartford solicits consignments from all parts of the country and makes liberal advances on all goods entrusted to his care, and looks out carefully for the interests of his customers. He is a gentleman of high social standing in the community, is a member of the Common Council from the Eleventh Ward, and, in the Spring of 1879, was elected to the position of clerk of that body.

FLEMING & OGLEVEE,—*Wholesale Dealers in Hats, Caps & Furs, 139 Wood St.*

This business was originally started by Mr. Wm. Fleming in 1846. During the intervening years some changes in the management occurred, when in 1875, Mr. Fleming associated with him in the business Mr. J. W. Oglevee. They have the largest and most complete stock of Hats and Caps, Straw Goods, Ladies' Furs and Robes of all kinds to be found in this city, and are able to offer inducements to the trade in competition with New York, Philadelphia, Cleveland or Cincinnati. They keep constantly in stock the best and latest styles. For the Winter trade they are always prepared with a choice line of Ladies' Furs and Fur Goods, in which they do an extensive manufacturing business. They are exclusive agents for Dunlap & Co.'s Hats, and have a large sale of superior styles of their own designs, prepared specially for each season. With the present depressed prices their trade will average about \$160,000 per annum, extending through Western Pennsylvania, West Virginia, and Eastern and Central Ohio. Their book-keeper is S. H. Waddell. Traveling salesmen are L. N. Fickeson, James F. McQuaid and J. V. Aurentz, who are always authorized to give lowest quotations; besides this, seven men are employed inside the House. Mr. Fleming is a native of this city. Mr. Oglevee is a native of Fayette County, Pennsylvania. As a firm they bear an excellent reputation in every respect as a leading House in the trade. In the Retail Department this firm have lately instituted the One Price, Cash System, which is a new feature in the Hat trade and gives them special advantages.

A. M. McNISH,—*Sash, Blind and Door Machinery, etc., No. 116 Liberty St.*

Mr. A. M. McNish is a brother of the late Henry L. McNish, one of the founders of the firm of McNish & Butler, dissolved by the death of the former in 1871. Mr. Butler is carrying on business under the old firm name, although exclusively engaged in manufacturing specialties, and the general business of McNish & Butler is now handled by A. M. McNish, who started in business for himself in 1873, after having thirteen years' experience in the old House, which with his acquaintance has already secured for him a thriving and prosperous trade. Mr. McNish deals largely in all kinds of Sash, Blind and Door Machinery, Woodworth Planers and Machinists' Tools, Pulleys, Hangers, Shafting, Belting, Lace Leather and Belt Hooks, Pattern Letters, Twist Drills and Supplies of all descriptions. He is also Agent for Gardner's Patent Compensation Governor, one of the most important inventions of the age, and which should be used by every establishment in the country employing steam power. The trade of this House is steadily increasing and reaches every section of Western Pennsylvania, Eastern Ohio and West Virginia. He is largely patronized by builders of the two cities. Mr. McNish is a native of New York State, but has resided in Pittsburgh for many years.

DAVID GRAY,—*Practical Watchmaker and Jeweler, No. 11 Fifth Ave.*

Mr. Gray was born in Ireland July 4, 1845, and learned his trade in that country many years ago. He has for more than fifteen years been engaged in this line of business with many of the leading houses in England and Ireland, where he acquired a thorough practical knowledge of all its details. In 1873 he established the business now conducted by him at No. 11 Fifth Avenue, and has since met with success. He occupies two stories of the building, employing one assistant, besides giving his personal attention to the business. His trade is principally local, but the prompt and careful attention given to all work entrusted to him has given him an enviable reputation as a skillful workman and his trade is steadily increasing. He makes a specialty of fine Watch and Clock Repairing, guaranteeing all his work and making his prices moderate and satisfactory.

W. E. SCHMERTZ & CO.—Boots, Shoes and Rubbers, 43 Fifth Ave.

Among the many industries that have tended to extend and enlarge the commercial and manufacturing importance of Pittsburgh, perhaps no one has had a more favorable influence upon the mercantile relations of this community than the shoe trade, and certainly no house in that trade exhibits more energy and enterprise than the subject of this brief sketch. Established in 1848 by W. E. Schmertz, with but limited capital and meagre resources, under his management the business gradually merged out of comparative obscurity, until it became and has remained for years, a controlling influence to the entire trade. In 1860, the style of the House became as above, Mr. T. A. Kammerer became a partner of the concern, other partners came in in 1869, composing the firm at the present time.

The business premises occupied and owned by W. E. Schmertz & Co., are, for many reasons, worthy of particular attention. Situated on the principal thoroughfare of the city, they consist of a handsome iron-front building, 25x240 feet, four stories in height, with finished basement under the whole edifice. Here are ware and salesrooms of ample magnitude, counting rooms and offices with all modern appliances, such as steam elevators and heating apparatus, every arrangement being perfectly adapted for convenience and comfort in the transaction of the business. Here also are accommodations for a stock that ranges in value from \$150,000 to \$175,000, and a trade that reaches \$600,000 per annum. Ten traveling salesmen are kept continually upon the road, 330 hands, the majority of whom are convicts at the Western Penitentiary, are employed in the manufacture of Boots and shoes, 40 skilled workmen being engaged upon the finest grades of Ladies', Misses' and Children's wear known to the trade. This battalion of operatives require a disbursement of about \$60,000 a year and turn out about 30,000 pairs of Boots, Shoes, Gaiters, etc., per month, establishing the fact of this House being the largest in the State of Pennsylvania.

Through Western Pennsylvania, Ohio, West Virginia, Indiana and over the far West to Colorado, Dakota and California, through the South and North-west, the products of this House find a perpetual market and an increasing reputation. In view of the standing resources and public benefits conferred by this firm, some brief mention of its members may not be inappropriate in a commemorative publication of this kind, and will inspire with every decade an increasing interest. The senior partner, W. E. Schmertz, Esq., was born in Prussia in 1826; coming with his father to this city in 1832 he became identified with his present business at the age of twenty-two years, and from that period his career has been among those most worthy of imitation. As President of the Third National Bank, Vice President of the Chamber of Commerce, Trustee of the Dollar Savings Bank, Director of the Exposition Society, and connected with other corporations and public trusts, Mr. Schmertz has established a reputation for fidelity and remarkable business acumen, of which any citizen of this commonwealth might be proud.

Mr. Kammerer, born in 1834 and a native of Pittsburgh, has always been prominent in fostering every public movement that seemed likely to conduce to the general good. Mr. Dunning and Mr. Murray are respectively natives of Ohio and Pennsylvania, but have been residents of this city for some years. As a firm, it is not too much to say of them that in all those attributes that lead to success and universal consideration W. E. Schmertz & Co. have been endowed to a remarkable degree.

DUNCAN & THOMPSONS,—Brush Manufactory, No. 37 Fifth Ave.

The reputation of Pittsburgh Brushes extends throughout the United States and even to the islands of the Atlantic and Pacific Ocean. Among the leading manufacturers in this city, we may mention the reliable and enterprising House of Duncan & Thompson, who, although comparatively young in the business, are gentlemen thoroughly conversant with every detail of the trade as manufacturers and energetic business men. The House was established in 1875 by Duncan & Dilks, who conducted the business until October, 1877, when Mr. Dilks retired and was succeeded by Mr. John W. Thompson. In January, 1879, the firm became Duncan & Thompsons. Mr. John D. Thompson, the founder of the firm of J. D. Thompson & Co., became a partner. His long experience in the manufacture of brushes justifies the claim of the leading Brush House in Pittsburgh. While they manufacture and keep in stock a full assortment of all kinds of Brushes, their specialty is their celebrated brand of Paint, Varnish, White Wash and Kalsomine Brushes, of which they are sole manufacturers, and which are considered by the trade superior to any in the market.

They occupy the large two-story building at No. 37 Fifth Avenue, 120 feet deep, and employ a large number of experienced workmen. Their trade at present is among the jobbers, retailers and artisans of Western Pennsylvania and adjacent territory, but the reputation of their goods is rapidly spreading throughout the West and South. They carry an average stock of from \$15,000 to \$18,000, with a yearly business exceeding \$60,000. Mr. Duncan was born in Butler County, Pennsylvania, in 1844, and has resided in Pittsburgh since 1865. Mr. J. D. Thompson is a native of Scotland, and came to Pittsburgh in 1836. Mr. John W. Thompson is a son of the last-named gentleman and was born in Allegheny in 1854.

MONONGAHELA INSURANCE CO.—Office, No. 89 Fourth Ave.

The Monongahela Insurance Co., of Pittsburgh, has been in existence for the past quarter of a century, having been incorporated in 1854. Their actual cash capital is \$175,000, and their business, which amounts to about \$30,000 per annum, is conducted in a manner eminently worthy of the business reputation of the well-known gentlemen composing its Board of Directors and General Managers. Their business is Marine, Inland and General Fire Insurance, and is principally local, being confined almost exclusively within the limits of Allegheny County. The officers of the Company are Wm. A. Caldwell, President, Geo. A. Berry, Vice President, John H. Clancy, Secretary, and F. A. Dohrman, Surveyor, with the following Board of Directors: Wm. A. Caldwell, President, Geo. A. Berry, Vice President, William Rea, Robert Dalzell, William Means, James Woodburn, R. H. Palmer, James McCandless, David M. Smith, Geo. W. Dilworth, Charles Atwell, Henry Hays, James A. McDevitt, William Cooper.

GILLIAM MAN'F'G. CO.—Saddlery Hardware, etc., 97 and 99 Third Ave.

Established in 1867 by the present proprietor, A. Gilliam, Esq., this concern has grown from very limited proportions to a prominent position among the industries of the Iron City. The premises now occupied in this branch of manufacture consist of one large four-story double-brick edifice, at Nos. 97 and 99 Third Avenue, 30x84 feet, the first floor being used for sales and exhibition room, offices, counting rooms, etc., and the rest of the building for manufacturing all kinds of Saddlery Hardware, Gig-saddles and Gilliam's Patent Coach Pads, etc. In comparison with other similar establishments, it may be said that this is the only one west of the Alleghenies, all the goods manufactured here being original in design with Mr. Gilliam and protected by letters patent from infringement. Owing largely to this fact, the trade of the House has extended from Canada to California, and it is claimed that in quality, design and cheapness no house in the United States can produce such satisfactory results. Fifty hands, two traveling salesmen, clerks, etc., are required to conduct the business, the machinery consisting of ten sewing machines and numerous steam presses, dies and other appliances for cutting out stock and securing rapid and perfect work.

Mr. Gilliam is a native of Central Ohio and was formerly engaged in manufacturing business of a similar line of goods in Cincinnati, removing to this city in 1867, since which time he has done no little to promote its industries, and has become thoroughly identified with its development and prosperity. No house enjoys a higher position commercially than the Gilliam Manufacturing Company, which, considering the liberal and enterprising spirit that actuates its operations, is as natural as it is justly deserved.

A. M. SPEER, M. D.—Oculist and Aurist, No. 212 Penn Ave.

The treatment of Diseases of the Eye and Ear is one of the most difficult and delicate departments of the medical profession, and of late years it has been almost entirely given over by the most reliable practitioners in the country to those who make it their especial study. While many irresponsible physicians, anxious only to secure their fees, will attempt treatment of those delicate organs, without knowing or understanding their peculiarities, it will be noticed that the best and most reliable doctors of medicine will recommend their patients to the services of some successful and responsible oculist and aurist for treatment and cure.

Dr. Speer is a native of Pittsburgh, and has resided in the Iron City for forty-five years, excepting two years spent in Europe and five years as Surgeon in the Army. He graduated at Jefferson College, Philadelphia, and afterwards studied in the best medical schools of Europe. He now devotes his special attention to Diseases of the Eye and Ear. His father is one of the oldest and best known physicians of Pittsburgh, having been in continual practice here since 1825. Ten years since he retired, after a successful and honorable career of more than half a century. Dr. A. M. Speer, whose office is located at No. 212 Penn Avenue, is a thorough and practical physician and has met with marked success in the specialty for which he is noted.

FAIRBANK'S STANDARD SCALES.—H. C. Dickinson, Agt., 48 Wood St.

The well-known and deservedly popular Scales manufactured by Fairbanks & Co., at St. Johnsbury, Vermont, are universally acknowledged to be the Standard, not only in this country, but in many foreign countries. This old-established and reliable House is represented in Pittsburgh by Mr. H. C. Dickinson, whose headquarters is at No. 48 Wood Street. They have been established here since 1866 and occupy three stories and basement of the spacious warehouse above indicated. He carries in stock a full line of the various sizes and patterns of scales manufactured by the Messrs Fairbanks, which he offers at factory prices. He also takes orders for the firm, shipping directly from the works, if desired. Mr. Dickinson has sole control of the "Type Writer" for this section and is Agent for the most approved styles of Lawn Mowers and Hancock's Patent Inspirator, an invention which has received the highest encomiums from all who have given it a trial. Grocer's Fixtures form an important feature of his business, which amounts to from \$60,000 to \$75,000 per annum. They make a specialty of Fairbank's Scales and of repairing the same. His trade extends through Western Pennsylvania, Eastern Ohio and West Virginia, and ten assistants are required in his extensive establishment. Mr. Dickinson has been a resident of Pittsburgh since 1866, where he has built up a large and flourishing business, and a name which is unblemished in the commercial world.

PORTER & DONALDSON,—Wholesale Millinery, Cor. 5th Av. & Liberty St.

This enterprising House, which now ranks as the leading Wholesale Millinery Establishment of Pittsburgh, was founded in 1867 by succeeding to an old established House in Steubenville, Ohio. In that place an annual business of \$100,000 was done under the firm name of Porter, Donaldson & Co. In 1872 the present House was established in Pittsburgh, but the above-named members of the firm still retained their interest in the old House at Steubenville.

In 1873 the firm was divided, Messrs. Porter & Donaldson assuming the entire ownership and control of the Pittsburgh branch and the other members of the firm continuing the Steubenville House. They occupy here the second and third floors of the new and elegant edifice corner of Liberty Street and Fifth Avenue, 35x100 feet, which is filled with an extensive and well-selected assortment of seasonable millinery goods, consisting of Ribbons, Laces, Flowers, Feathers, Hats, Bonnets, Silks, Velvets, etc. They carry an average stock of about \$30,000, although at certain seasons the valuation will reach double that amount, and transact an annual business exceeding \$200,000, which is principally located in Western Pennsylvania, Ohio, West Virginia and adjoining States. They employ thirteen clerks and salesmen, and their trade is exclusively wholesale. They import direct a large portion of their foreign goods and are recognized as gentlemen of enterprise, ability and strict integrity. To the Jobber or Retail Dealer, this House presents advantages not equalled by any other House in Pittsburgh.

H. D. McKNIGHT & CO.—Eclipse Steam Pump Works, First Ave. & Ferry St.

The articles manufactured at these extensive works are principally Steam Pumping Machinery and Pumps of every description, and the celebrated Eclipse Steam Boiler. This House has long been noted for their excellent quality of work, for their complete and unrivalled machinery and facilities for manufacturing, and under the new managers they will in no wise deteriorate or fall short of the reputation of previous years. These works were established in 1853 by Mr. Davison Phillips, who conducted the business for five years, when Mr. Wm. H. Culey was admitted as a partner under the firm name of Phillips & Culey. In 1873 this firm was succeeded by S. D. Hubbard & Co., who carried on the business for five years, when, in 1878, the present proprietors assumed the sole control. The business now amounts in round numbers to not less than \$100,000 per annum. The "Eclipse" Works occupy the large four-story structure, 36x100 feet, at the corner of First Avenue and Ferry Street, employing twenty hands, with a monthly pay-roll averaging \$1,500. The motive power for their extensive machinery is supplied by one powerful sixty-horse power engine.

They manufacture the celebrated Eclipse Balance-Wheel Steam Pump, which has been pronounced by mechanical experts the best and most reliable steam pump now in use, having excellent qualities which will commend it to all who will investigate. They are made for both hot and cold water. At the Centennial Exposition in Philadelphia, in 1876, these pumps were awarded the highest Medal of Honor and a Diploma of Merit. Every pump furnished by this establishment is fully guaranteed. In addition to the various pumps for feeding boilers, Messrs. McKnight & Co. make a specialty of Pumps for the following purposes: Water Works, Mining, Oil Refinery, Oil Tanks, Soap, Lye, Lard, Vinegar, Tar, Tallow, Benzine, Bleacheries, Gas Works, etc., etc., and, in fact, every description or style of Pump which by any possibility may be required. They also pay special attention to Repairing of all kinds in connection. The trade of these works extends all over the United States.

NIEMAN & AHLERS,—Merchant Tailors, & Furnishing Goods, 101 Smithfield St.

The elegant establishment of Nieman & Ahlers, located at No. 101 Smithfield Street, three doors from Fifth Avenue, has long been famous as the headquarters for fine Clothing and Gentlemen's Furnishing Goods. This House was established in 1854 by H. H. Nieman. In 1861 Mr. H. Ahlers became associated with him under the present firm name and style, and their business has largely increased under the judicious management of these enterprising gentlemen. They occupy the entire four floors, each 20x60, in Howard Block, at the number indicated, and carry a full line of desirable fabrics for gentlemen's wear, together with a large and judiciously selected assortment of Gents' Furnishing Goods. They make a specialty of manufacturing Fine Suits to order, in the most thorough, fashionable and workmanlike manner. The value of their stock is about \$9,000 and the annual business amounts from \$30,000 to \$40,000. They employ from twenty-five to thirty hands in their manufacturing department and their business is one of the largest in the city. Mr. H. H. Nieman was born in Germany in 1832; he came to the United States in 1846 and to Pittsburgh the same year. Mr. H. Ahlers is also a native of Germany, where he was born in 1832. He has been a resident of Pittsburgh since 1852.

J. D. BERND & CO.—Importers & Wholesale Millinery Goods, Cor. 5th Av. & Market St.

Mr. J. D. Bernd, the founder of this House, now in the seventeenth year of its existence, was born in the picturesque little village called Hohen-Solms, near Giesen, on the line of railway between Frankfort-on-Main and Cassel, in Germany. He came to this country at four years of age and received an elementary education in Philadelphia. His parents were in comfortable circumstances and held in high esteem in their old home in Germany. His father, a man of considerable culture and sterling integrity, meeting with reverses after coming here, made it incumbent on the children to earn a living, and thus the subject of this sketch, at the age of thirteen, commenced his career, and rose from humble errand boy, at a salary of fifty cents a week, through the various gradations of salesman, in various lines of business, traveling for his respective firms, which occasionally brought him to Pittsburgh. This is down to 1857, when his firm in Philadelphia (Mr. B. having a mere nominal interest in the business) succumbed to the panic, when he went to New York City. Still pursuing his vocation as traveling salesman until the Spring of 1861, he was sent out here to open a branch Millinery House, and the following Spring (1862) commenced here on his own account.

He first occupied the second-story front room over (then) Reed's Jewelry Store, at 94 Fifth Avenue. The next season (Fall 1862) he occupied the second story over what is now Jno. Wanamaker & Co's. In the Spring of 1863 he moved to his present location, occupying at that time only the second story of this building. Here the business gradually increased, until the year 1870, when the building was enlarged, making a frontage on Market Street of forty feet and seventy-five feet on Fifth Avenue. The firm then became J. D. Bernd & Co. by the admission of Mr. E. B. Eckstein as partner and occupying the entire three stories of the premises. The three stories were built to accommodate the increasing business of the firm, putting in elevator and all modern improvements, J. D. Bernd & Co. making all the interior embellishments and conveniences, making them the best adapted lofts for their business in this city, and, for that matter, any city in this country.

In 1873 Mr. S. L. Fleishman became a partner, with the view of adding notions and otherwise extending the business, but the panic followed, and it became necessary to contract instead of expanding. Mr. Fleishman retired from the business January 1, 1875. In 1877, Messrs. C. B. Elben and S. M. Rose, two of the head salesmen, were admitted to a silent interest in the House. In 1878, Mr. E. B. Eckstein opened a Retail Branch House in St. Louis, as Bernd & Eckstein. This business at the end of the first year became such an assured success that Mr. Eckstein assumed the St. Louis business on his account, leaving Mr. J. D. Bernd to continue the Pittsburgh House. Mr. Bernd has been twice to Europe since his advent in Pittsburgh, each time importing goods and forming permanent connections with that view. They have a nominal office in Paris and an active one in New York City represented by a buyer; besides, Mr. Bernd and Messrs. Rose and Elben are also frequently in the market. They use a fifty-trip firm book over the Pennsylvania Railroad to New York. These books are good only for a year, which gives evidence of the enterprise and energy displayed by this firm. Their sales range from \$225,000 to \$250,000 per annum, and being almost entirely Millinery Goods, gives it a commercial rank and standing among the largest of its class. Their business is largely in the two cities and through Eastern Ohio, Western Pennsylvania and West Virginia. Their stores for neatness and cleanliness are considered the model ones in this city, and are constantly commented on as to how a place can be kept so clean and fresh in Pittsburgh.

The business in all its various details of management is conducted upon principles of pure mercantile integrity, and it is to these merits that the credit, reputation and confidence of the House owes its success.

WM PICKERSGILL, Jr.—Man'fr. & Jobber of Boots & Shoes, 149 Wood St.

As pursuing a very important branch of industry bearing upon the general commercial prosperity and mercantile thrift of this city, the House of Wm. Pickersgill, Jr., may not be overlooked in a publication whose special object will be attained in the proper display of the natural resources and acquired advantages of Pittsburgh as a great center of manufacturers and productive trade.

This House was established in 1859, and for nearly a quarter of a century has continued a career whose success has been uninterrupted by the various convulsions, political and financial, that have taken place during that eventful period. Very early in its history Mr. Pickersgill perceived the advantages likely to accrue to his customers and himself from the establishment of a manufactory, where not only every grade of goods might be produced, but where special orders could be filled with promptness and economy, enabling him to compete on equal grounds with the Eastern manufacturers. From this idea originated his present extensive factory (in the rear of the warehouse and sales rooms), a large brick building, 20x80 feet, three stories in height, where are constantly employed from forty-five to fifty skilled operatives and from which is turned out work in every department that will bear comparison with that emanating from the largest and best known manufactories in the country. With these facilities, and occupying one of the largest business edifices in the city, a trade that extends through Pennsylvania and Ohio, West Virginia, Iowa, Indiana and Illinois, Mr. Pickersgill has established an annual business that will average about \$250,000, and requires in its various departments, aside from the manufactory, six traveling salesmen, two book-keepers, five city salesmen and other employes.

Altogether, the House of Mr. Pickersgill takes equal rank with any in the State and is entitled to consideration as such, while the principles upon which it is conducted are alike liberal and enterprising. As a business man the founder of this House has done no little to enhance the reputation of Pittsburgh in the diversity of its industries, and as one who has always conserved the public interest in every reformatory measure, he has achieved a place in the esteem of the community as richly deserved as it is sincere.

A. O'LEARY,—China, Glass and Queensware, No. 73 Wood St.

One of the oldest Houses in its line in this city is that of Mr. A. O'Leary, now situated at No. 73 Wood Street. The business was first started by John J. O'Leary in 1854, with a capital of \$10,000, and conducted by him up to 1871, when he was succeeded by the present proprietor who has perfected arrangements for meeting the wants of the trade upon as good terms as any house in Cleveland or Philadelphia. He carries a stock of about \$10,000, consisting of every desirable variety of Foreign and Domestic China, Glass and Queensware, and occupies three floors and basement of an ample building, where he employs three men and is doing a trade of about \$30,000 per annum, through Western Pennsylvania, but has a large city trade. His Retail Department offers special inducements and attracts a large patronage. Mr. O'Leary handles English and French Goods quite extensively and imports directly from foreign manufacturers. He is thirty-five years of age, a native of this city, and an enterprising business man.

GETTY & CO.—Distillers & Wholesale Dealers in Whiskey, 184 & 186 First Ave.

The house of Getty & Co., was founded in 1872 by Mr. James Getty, Jr., who is at present sole proprietor. Mr. Getty was born in Philadelphia, but became a resident of Pittsburgh at an early age. He deals largely in Wines, Liquors, &c., carrying a stock of about \$3,000, and transacting a business of \$30,000 per annum. His trade is principally located in Pittsburgh and vicinity, and he makes a specialty of supplying families with the purest and best articles of Old Manongahela Rye Whiskey. His stores are located at Nos. 184 & 186 First Avenue, being 36x50 feet in size. To all, in want of a pure article of unadulterated liquors for medicinal or family use, we can confidently recommend the house of Getty & Co., whose goods are selected expressly for the purposes named.

McCANDLESS, JAMISON & CO.—Dry Goods and Notions, 103 Wood St.

This House was established in 1838 by Gregg & McCandless, succeeded by J. M. McCandless & Co. in 1851, and by the present style of firm in 1854, with a few changes in its members which are now composed of Jas. McCandless, Thomas Jamison and J. M. Simpson, who are still conducting the business, Mr. McCandless residing in the East, where he manages the purchasing department of the concern at No. 214 Chestnut Street, Philadelphia.

As the oldest, and one of the largest Dry Goods Houses in this city, its commercial connections range not alone over the State of Pennsylvania, but Eastern Ohio, West Virginia and Maryland, together with other points more distantly removed. Unshaken by the financial disasters that have wrecked less solid and conservative firms, the history of this House for forty-one years is one of the most pointed exponents possible of the business thrift and able management of the concern, which in spite of all general depression has continued to increase its strength, trade and special facilities.

In the departments of Woolens, Domestic Blankets and Flannels, this House offers inducements to buyers which are not only unrivalled in this but in any other market, and forms the bulk of the enormous business done by the firm, which in this city is conducted by Messrs. Jamison and Simpson, resident partners, whose names are synonymous with that liberal commercial rectitude for which the House has always been characterized.

ALBREE & CO.—Boots and Shoes, No. 71 Wood St.

This House was established by Mr. Geo. Albree more than half a century ago, during which period the business has been conducted without interruption, regardless of general commercial derangements, financial panics, or social upheavals. As the oldest Shoe house in the West, it is at the same time perhaps the best known, from the remarkable characteristics of its founder, whose unflinching integrity, great liberality, and financial solvency, are as widely recognized as his marked proficiency as a meteorologist. In 1876 Mr. Geo. Albree retired from active participation in the business, and was succeeded under the above title by his son, Jos. Albree, and W. P. Thomson, who still maintain the established conservative proclivities of the House, at the same time infusing into the business an energy that keeps it abreast of the times and in sharp competition with younger contemporaries in the same trade. The business premises occupied by the firm are of ample dimensions for the storage and display of a stock extraordinary for excellence, and the uniform care displayed in its selection. The jobbing trade of the house extends beyond our own into two or three adjacent States, while the retail department, to which the house is giving close attention and great variety of styles to the custom, at prices ranging usually lower than the exclusively retail houses, embraces the highest class of dealers and buyers within the commercial range of this city and home patrons.

DR. GEORGE H. KEYSER,—Physician, 120 & 240 Penn Ave.

For many years the name of Doctor Keyser has been "familiar as household words" to most of the families of Pittsburgh and the towns within a radius of three hundred miles, not only by reason of the wonderful cures he has performed in his professional capacity, but the excellence and efficacy of the many preparations from his laboratory. Dr. Keyser is a native of Franklin county, Pa., but has for many years resided in Pittsburgh. He is a graduate of two medical schools, both allopathic and eclectic, and has attained considerable celebrity as a surgeon. He has been a practitioner for the past thirty-five years and met with the most gratifying success. Of late years he has abandoned the allopathic system of treatment and devotes his attention principally to the treatment and cure of chronic diseases. Probably no physician living to-day has devoted so much attention and study to diseases of the lungs and pulmonary organs, and we are confident that no one has effected so many permanent cures of the most difficult cases. The doctor has been a well known, highly respected and honored citizen of Pittsburgh for thirty-one years, during twenty-seven of which, he was proprietor of the leading drug store of the City, on Wood street. For a number of years he was president of the eclectic medical association of Allegheny county, and has always enjoyed the most unbounded confidence and respect of the profession. His offices at present are at No. 120 and at 240 Penn Ave., his laboratory being at the latter number, where he manufactures and distributes all over the country, his famous preparations known as "Dr. Keyser's Lung Cure or Pulmonary Restorative," "Dr. Keyser's Pectoral Cough Syrup" and other medicines of his own exclusive discovery and manufacture. The virtues of his widely known and justly celebrated medicines are known and appreciated by invalids in all parts of the world, and we can only advise all afflicted with diseases of the lungs or pulmonary organs, to call on Dr. Keyser, or send for his valuable works, which will be forwarded free on application as above.

WM. GUCKERT & CO.—Desks, Tables, Wardrobes, Cherry & Strawberry Alleys.

The manufacture of Extension and Centre Tables, Wardrobes, Office Desks, Book Cases and similar articles is carried on extensively in connection with that of Banisters, Newel posts, Hand Railings, &c., by Messrs. William Guckert & Co., at their factories, corner of Cherry and Strawberry alleys, between Smithfield & Grant Sts. This business was established in 1849 by Valentine Guckert & Bro., who were succeeded in 1873 by the present proprietors Messrs. William, Anthony and Frank Guckert, all of whom are natives and life-long residents of Allegheny county. They occupy two large factories at the location mentioned above, one, four stories in height, 50x60 feet in size, which is used for the manufacture of every description of cabinet work, and another, three stories high, 25x60, where wood turning, scroll sawing and jobbing of all kind's is carried on. The capital employed in the business is \$15,000, and their trade, which is larger than that of any similar establishment in the West, extends through Pennsylvania, Ohio, Virginia, West Virginia and many of the other States. The specialty of this house is the manufacture of Centre and Extension Tables, of which they keep a large stock on hand and manufacture to order from any desired material and in any size or style. They also manufacture a variety of styles of Brackets from their own patterns and designs, besides giving their careful attention to every description of job work in their line.

S. HAMILTON,—Pianos and Organs, 87 Fifth Ave.

In 1871 the firm of S. Hamilton & Co. was established, and in 1875 Mr. Hamilton became sole proprietor. The line of business carried on by him is that of wholesale and retail dealer in Pianos and Organs, being the only house in this city dealing exclusively in these instruments. He occupies the spacious sales rooms, 20x120 feet, at No. 87 Fifth avenue, nearly opposite the Pittsburgh Opera House, with a stock of these goods valued at from \$20,000 to \$25,000, doing an annual business of \$150,000, which is the largest in that line of any house in the city. Mr. Hamilton is agent for the celebrated Decker Bros. Pianos and the Estey Cottage Organs, both of which articles have acquired a world-wide reputation as being second to none manufactured. While he makes a specialty of these superior articles, he also keeps a large line of cheaper grades and other makes, which, owing to the superior advantages possessed by him, he is enabled to sell at great bargains. Mr. Hamilton is a native of Allegheny county, and well known and widely esteemed as a citizen and business man.

ALLEGHENY INSURANCE CO.—Office, No. 67 Fourth Ave.

Incorporated twenty years ago under the laws of Pennsylvania, as a Fire and Marine Insurance Co., the Allegheny Insurance Company began business April 4th, 1859, and is therefore intimately connected with the most vital periods of our commercial and municipal history. Among those who were interested in the inception of this organization as applicants for a charter and stockholders, are observed names that can never be omitted from a record of the industries of Pittsburgh; the list is given entire, because many of them have passed away, leaving untarnished names and a projected influence that must affect every institution with which they were connected. Incorporation Commissioners: Hon. Thos. M. Howe, Jas. B. Murray, Esq., Dr. C. G. Hussey, Harvey Childs, Esq., Wm. M. Lyon, Esq., John D. McCord, Esq., Isaac Jones, Esq., Geo. W. Jackson, John A. Wilson, Geo. R. White, Allen Kramer, Hon. Geo. W. Cass, Capt. Robt. Beer, R. B. Sterling, James Laughlin, Alexander Speer, Mark W. Watson, and Robt. Patrick. The present officers of the company are as follows: John Irwin, Jr., Prest., Jas. S. McCord, Vice Prest., C. G. Donnell, Secty., and Capt. Wm. Dean, Gen'l Ag't., all being natives of Pennsylvania, except Capt. Dean, who was born in Columbiana Co., Ohio, but has been connected with this company for twenty years, and for thirty years previous was engaged in the River traffic between this point and Cincinnati as captain upon the old Packet line. Mr. Irwin is a member of the firm of T. H. Nevins & Co., White Lead Manufacturers, in Allegheny City, and Mr. McCord is now senior partner of the old house of McCord & Co., Hatters, No. 131 Wood St., and Mr. Donnell has always been intimately identified with the Insurance business as an able underwriter. So officered and managed, this company has stood the various disasters of nearly a quarter of a century with unflinching solvency. It has paid all its losses promptly and rarely passed a dividend. With a paid up capital of \$100,000 it has accumulated assets to the amount of \$131,173.63, with a surplus of over \$16,000. The policy of its management from the first has been a liberal and a just one, the natural result being that no similar institution in the city is regarded with greater favor or respect.

CENTRAL REFINING CO.—Office, 173 Wood Street.

The gigantic growth and present importance of the Oil Trade in Pennsylvania, and especially with reference to its bearing upon the business of Pittsburgh, may be perhaps somewhat illustrated by a brief account of the operations of the Central Refining Company, which was incorporated in 1873, the officers being W. M. McKelvey, President, Wm. Frew, Esq., Vice President, and F. J. Gillespie, Secretary and Treasurer, the capital stock being \$255,300. The property of the Company consists of one Refinery and Barrel Factory at Kennedy's Station on the West Pennsylvania Railroad, and one Refinery at Sharpsburg, on the same road, eighteen buildings, substantially constructed, forty tanks, two steam engines, fourteen steam pumps, with other machinery, together with all the modern apparatus of the barrel factory, covering in all nearly fifty acres. Here are employed about 350 hands in the various departments, requiring a monthly disbursement of \$12,000 and producing 40,000 barrels of Refined Oil per month, all of which finds its way to European and other foreign markets.

J. H. STEVENSON,—Attorney at Law, No. 100 Fifth Ave.

In addition to his regular law practice, Mr. Stevenson is Notary Public, Real Estate Agent, Patent Attorney and Solicitor. He has been established in Pittsburgh since 1871 and enjoys a large and lucrative patronage. His Real Estate business is large, extending through Western Pennsylvania, and having a thorough understanding of the Patent business, examinations of claims and securing patents has been very successful in that line. Mr. Stevenson was born in Lawrence county, Pa., in 1842. He received his early education in the public schools of New Castle, Pa., and read law with J. Smith Du Shane, Esq., then district attorney of Lawrence county. He was admitted to the bar in 1868 at New Castle, where he practiced successfully for two years. He afterwards practiced three years in Beaver county, from which place he removed to Pittsburgh, where he has met with the most encouraging success and established a high reputation.

C. F. AHLERS,—Merchant Tailor, No. 77 Smithfield St.

This house was established in 1867 as Ahlers and Bayha, the latter retiring from the firm in 1872 and Mr. Ahlers becoming sole proprietor. He has stock amounting in value to \$4,000, and at present is transacting an annual business of \$15,000, although at times it has amounted to as high as \$25,000. He has eleven men in his employ, to whom he pays an average salary of \$14 per week. His trade, which is large, and rapidly increasing, is located principally in the city and surrounding country. Mr. Ahlers' goods are of the best quality, and the fit and style of his suits are unequalled in the city. He was born in Germany in 1834, and came to Pittsburgh in 1857, where he has since resided.

H. LANZ,—Boots and Shoes, 113 Market Street, at Junction of Market and Liberty Sts.

Mr. Lanz is classed among the few first-class workmen in the city. His neat establishment is divided into two departments, viz:—Manufactory and Salesroom, in which departments five hands, men who are thoroughly first-class workmen, are busily employed. Mr. Lanz carries a stock ranging from \$2,000 to \$3,000, composed of the very best articles that can be manufactured. He deals in all kinds of Men and Boys', as well as Misses' and Ladies' Goods, both of the heavy and fine manufacture. Mr. Lanz has been engaged in this business for about twenty years, and formerly was established at No. 21 Diamond Street, where he had hosts of customers and friends whom he still retains. His trade is located mainly in the city and is rapidly increasing since his removal to Market and Liberty Streets. He makes a specialty of Fine Custom Work, in the manufacture of which he has no superiors and few equals.

R. C. OEHLER,—No. 78 Fourth Avenue.

Painter, Proprietor & Mfr of Oehmler's Patent Star Gold Paint, Liquid & Blackboard Slating.

For fifteen years Mr. Oehmler has been one of the most prosperous painters in our city and still gives employment to 6 or 8 hands, and often to a large number, in the capacity of house, office, sign and ornamental painting, gilding, etc. He is the patentee and manufacturer of Oehmler's Patent Star Gold Paint Liquid, "Ready Made Sizing" and Oehmler's Slating for Blackboards, all three of which are the results of his thorough knowledge of oils, paints and metals, after close study and untiring experiments. The Star Gold Paint Liquid and the Blackboard Slating are his specialties. The former being a composition used in the form of paint, which gives a bright, durable, bronze surface to metals to which it is applied, superior to any other preparation in the world; the latter, also in a form to be applied as paint, has had practical tests in our own public schools and has manifested all he claims for it as a superior slating surface for marking, distinctiveness and easiness of erasure, and an excellent blackboard surface, applicable either to plaster, wood or paper. His products have already attained a celebrity throughout this country and Europe, and can be found in nearly every paint and drug store, being represented in our own city by Geo. A. Kelly & Co., and other first class houses.

H. E. COLLINS & CO.—*Brokers in Pig Iron & Metals, 175 Wood St., Cor. Liberty.*

As Special Dealers and Brokers in Ores, Iron, Zinc, Lead and Metals, Pig Iron, Spelter, Spiegeleisen, Ferro, Manganese and Copper, New Iron and Steel Rails, Old Iron and Steel Rails and Car Wheels, Bessemer Rail Ends, etc., the firm of H. E. Collins & Co. have established a connection and risen to a prominence among the manufacturers of this city that places them at the head of this very important branch of industry.

Mr. Collins is originally from New York State, and Mr. Jas. H. Murdock (the Co. of the firm) is a native of Ohio, both, however, being intimately identified with the iron trade of Missouri and Pennsylvania for fifteen years. Thoroughly educated in their business and practically familiar with the metals, and metallurgical properties, grades, distinctions and qualities of the products in which they deal, this House can offer advantages to its customers not surpassed by any similar concern in the country. The wide extent from which this firm draws consignments embraces every metal and ore-producing State, the Canadas and Great Britain, relations being established wherever the least advantage is to be gained or the slightest benefit accrues to those for whom they are commissioned to act.

Though the career as a firm of H. E. Collins & Co. has dated only from 1877, the progress they have made in that short period and the rapidly increasing importance of the House would be sufficient evidence, were others wanting, that the energy, knowledge and enterprise displayed by it is a natural result, in the esteem and high consideration with which it is held.

FLEISHMAN BROS.—*Trimmings, Millinery & Fancy Goods, No. 92 Market St.*

Founded by S. C. & E. Fleishman in 1875 as jobbers and retail dealers in Millinery, Fancy Goods, Flowers, Trimmings and general Furnishing, this house soon became a prominent one from the enterprising and successful manner of its competition with older cotemporaries. With a very comprehensive experience in the business, together with Eastern and importing connections that insure every advantage that can be desired from a careful scrutiny of the markets, the Messrs. Fleishman are almost always enabled to offer extraordinary advantages to buyers, and are rapidly establishing this fact by the remarkable increase of their trade and the favor with which the house is regarded by the best buyers in the city. In Kid Gloves and Corsets, made specially for them, and protected with their own trade mark, the firm make a specialty, and in this line are beyond competition. Another specialty of the house is their millinery department, which is always represented with a choice selection of trimmed hats, and others not trimmed, accommodating parties by trimming to order, which gives employment to a large force of trimmers who occupy the second floor of the building. With handsome and commodious premises in the very best location, a numerous staff of assistants, and a stock noted for the good taste evinced in selection, the house of Messrs. Fleishman Bros. is heartily commended to the public as affording facilities in their line of trade hard to duplicate in this or any other city.

THOMAS HARE,—*Saddlery Hardware and Carriage Trimmings, 135 Wood Street.*

This branch of business has assumed extensive proportions, and this old-established House has long enjoyed a remunerative patronage, offering as it has in the past and still continues to do, the best facilities to the trade for supplying articles in this line upon the most favorable terms. This business was originally started in 1856 by McWhinney, Hare & Co. In 1861 the Company was dropped from the firm. In 1866 it became Thomas Hare & Brother. Upon the death of his brother in January, 1878, Mr. Thomas Hare assumed the entire control of the business, which he continues to conduct with most encouraging results and business ability. He carries a stock of from \$40,000 to \$50,000 and his annual sales will reach about \$125,000. His place of business is at 135 Wood Street, above Fifth Avenue, where he occupies four floors and basement of an ample building and employs eight inside clerks and keeps two traveling salesmen, with trade principally through Ohio and Western Pennsylvania. He carries large and diversified lines of Saddler's Hardware, both foreign and domestic, and Carriage Trimmings of all desirable kinds. His thorough acquaintance with the business and superior facilities enable him to offer the closest figures to the trade and to compete with any house in this city, or with Cleveland or Philadelphia. Mr. Hare has been a resident of Pittsburgh since 1847, and is consequently closely identified with its business interests and prosperity.

G. B. BARRETT & CO.—*Wholesale Jewelers, &c., No. 77 Fifth Avenue.*

Pittsburgh combines more geographical advantages of position than any inland city of the United States. Within a radius of four hundred miles from the Iron City some of the following States entire and portions of others may be reached: Pennsylvania, New York, Massachusetts, Vermont, Connecticut, Rhode Island, Delaware, New Jersey, Maryland, Virginia, West Virginia, Ohio, North Carolina, South Carolina, Tennessee, Kentucky, Indiana, Illinois, Michigan and Canada West. With such a vast scope for the sale of her manufactures and merchandise, is it any wonder that she stands to-day celebrated for the magnitude and extent of her trade and for the enterprise of her merchants and business men? In every branch of trade required in the United States, Pittsburgh can boast of representative business houses which compare favorably with any in the Eastern cities. In the line of Fine Watches, Diamonds and Jewelry, the House of G. B. Barrett & Co., of No. 77 Fifth Avenue, takes rank among the leading and most reliable in the land. The firm was established in 1871 by the present proprietors, Mr. G. B. Barrett and Mr. Wallace Patrick. They occupy two floors, 25x82, employing nine clerks and assistants and transacting a yearly business of from \$100,000 to \$200,000, which is principally in Pennsylvania, Ohio, Maryland, Virginia, West Virginia and territory adjacent. They carry a stock of \$50,000 to \$60,000, are extensive importers of Diamonds, Watches, Jewelry, Clocks, Watch-makers' Materials, etc. Mr. Barrett is a native of Eastern Ohio, where he was born in 1834. He has been a resident of Pittsburgh since 1869. Mr. Patrick was born in Ireland in 1829, but has for many years lived and done business in Pittsburgh. This is the largest wholesale jobbing house in Pittsburgh in the jewelry line.

JOHN J. McCORMICK,—*European Steamship Agent, Smithfield St. & Fourth Av.*

The leading agent in Pittsburgh for the various European Steamship Lines, and also holds first, fifth and tenth position amongst the leading agents of the U. S. For the National Line, first in the United States, Inman, fifth, Cunard, ninth, is Mr. John J. McCormick, whose office is located at the corner of Smithfield Street and Fourth Avenue. Mr. McCormick was born in the city of Brooklyn, N. Y., in 1834, and came to Pittsburgh in 1865. In the year 1868 he opened an office as General Steamship Agent, and the business under his management has grown to be one of considerable importance. Mr. McCormick directly represents the following well-known lines, viz: Cunard, Inman, White Star, National, American, Guion, Anchor, State, Red Star, etc., and Steamers to San Francisco, Australia, Bermuda, Nassau, Savannah, Florida, etc. He also procures drafts for £1 and upwards on the leading and most responsible banks of Dublin, Belfast, London, Glasgow and at Companies' offices in London, Liverpool, Queenstown, Belfast, Derry and Glasgow, and attends to the obtaining of Passports and other Notarial business. His business, besides being largely of a local character, extends through the States of Pennsylvania, Ohio, Kansas, Nebraska, Colorado, and many of the Western States.

WM. P. BENNETT,—*Blank Books, Binding, etc., No. 94 Fifth Avenue.*

For excellence of workmanship, quality of material, beauty of design and durability, the specimens of Blank Books turned out from the Bindery of Mr. Wm. P. Bennett will compare favorably with those of any other establishment in the country. The business was founded in 1859 by J. R. Welden and in 1875 it passed into the hands of Mr. Bennett, who is a thorough, practical workman and master of his trade. Mr. Bennett is a native and life-long resident of Allegheny City, where he was born in 1851. He carries a stock of about \$1,200 and transacts a yearly business of from \$16,000 to \$20,000 in the manufacture of Blank Books and all kinds of work pertaining to a General Book Bindery. He occupies two floors, 22x65, at No. 94 Fifth Avenue, giving employment to fifteen hands, with a weekly pay-roll amounting to about \$150.00. His trade, which is confined principally to the two cities and adjacent country, is of the best class and is steadily increasing. Mr. Bennett's specialties are Blank Book Work and Sundry-School Supplies.

F. SHANLEY,—*Boots and Shoes, 46 Smithfield Street.*

The business now conducted by Mr. Shanley at No. 46 Smithfield Street, between Third and Fourth Avenues, was established in 1865 by Mr. T. McCartan. In 1870, Mr. Shanley was admitted as a partner under the firm name of McCartan & Shanley. In 1874, the style of firm was again changed to Shanley & Kelley, and in 1877 Mr. Shanley became sole proprietor. Under all these changes of administration the popularity of the goods manufactured by this House has remained unchanged and the trade has steadily increased until it has become as extensive as that of any similar establishment in the city. Mr. Shanley occupies the entire three-story building, 20x65 feet, at the number mentioned, with a stock valued at from \$12,000 to \$16,000. His yearly business exceeds \$30,000 and extends all over the country, Mr. Shanley having customers even in California and Texas. He employs twelve first-class workmen, whose pay amounts to about \$125.00 per week. The manufacture of fine Boots and Shoes for Ladies and Gentlemen, is a specialty of this House and Mr. Shanley numbers among his regular customers a large number of the first families of the Smoky City as well as of adjoining States. Mr. Shanley was born in Ireland in 1843 and came to the United States in 1866, locating in Pittsburgh, where he has since resided.

WALTER ANDERSON,—*Merchant Tailor, Cor. Wood & 6th Av. & 226 Liberty St.*

There is no longer a question as to the propriety of the employment of a competent Merchant Tailor, with those who appreciate properly fitting garments. Clothes made for nobody in particular, never fit anybody in particular. One of the most popular establishments of this kind in this city is that of Mr. Walter Anderson, whose place of business is situated as above. The business was started in March, 1875, and has met with marked success ever since its commencement. Mr. Anderson was born in Scotland in 1834, and came to this country in 1865. He will be found a pleasant and reliable gentleman to transact business with, and as he employs only first class experienced cutters and workhands, you are assured perfect fitting and well made garments. This, he is at all times prepared to guarantee. His stock of price goods embraces Fine Cloths, English and French Cassimeres and all the most popular styles for coats, pants, vests or suits. He carries a stock of about \$6,000, which is constantly being replenished from the most reliable manufacturers and importers in the country, and the annual sales are about \$25,000. About twenty hands are employed in the manufacturing department, and his facilities for desirable goods, neat fits and lowest prices are unsurpassed by any establishment of the kind, East or West.

ROBERT LEA,—*Engine Builder and Machinist, Cor. First Avenue and Ferry Street.*

Peculiarly noted for its numerous mechanical industries, and especially those pertaining to the manufacture of machinery and the conversion of iron in all its forms, the establishment of Mr. Robert Lea becomes a natural subject of comment in a publication devoted to a thorough display of the resources of Pittsburgh and its gradual development.

Apprenticed as a boy in 1833, at seventeen years of age, to the firm of Stockhouse & Tomlinson, the pioneer machinists of this city, Mr. Lea became, upon the acquirement of his trade, a member of the firm of Warden, Nicholson & Co., (Mr. Lea and Mr. Marlette forming the "Co."), which firm, in 1844, built the entire machinery for the J. M. White, the famous swift Mississippi steambot, whose time still remains on record as never having been beaten, Mr. Lea making the patterns for all the machinery, subsequently Warden & Lea, succeeded by Robert Lea in 1854, and continuing without change from that period. With a grandfather who was a soldier in the French and Indian War of 1758 under General Forbes, and residing in the homestead where his father and himself were reared, Mr. Lea may indeed be regarded as having a more than ordinary interest in the welfare of this community, and vitally interested through his present enterprises as well as the traditions of the past, with everything that pertains to or bears upon the prosperity of the Iron City.

Though commencing business in a very small way and with but limited means, a steady increase has taken place, which puts this house upon a par with any in the city. Occupying premises that cover 60x104 feet, the works are divided into four departments, viz.:—Pattern Shop, Machine Shop, Foundry and Blacksmith Shop, the machinery of which is of the most superior kind and is operated by a twenty-horse power engine. Here Marine and Stationary Steam Engines are constructed of various designs and every desired capacity, Patterns made, and Castings of all descriptions in iron made to order. From thirty to thirty-five men are engaged, nearly all of whom are skilled artisans.

To the matter of Steamboat Machinery, Engines and Blacksmithing special attention is given, and the work turned out by this establishment has achieved a reputation that has extended the trade of the House to many of the adjacent and Western States. During the prolonged business career of Mr. Lea he has been not unfrequently identified with numerous civic and social reforms and connected with many of the staunchest institutions in Pittsburgh, such as Banks, Insurance Companies and other corporations. Always exerting an influence for good, he is well entitled to the high esteem with which he is universally regarded, the rich results of a life of laborious integrity.

J. P. DIEHL & SON,—*Wall Paper, No. 175 Liberty Street.*

This house, though having been established as late as 1877, has already taken a prominence in the Wall Paper trade that places it among those that stand at the head of business in this community, and entitles it to mention in a work of this kind. Started by J. P. and H. J. P. Diehl, father and son, under the above style, these gentlemen brought an extended experience to the work, the senior partner having been connected with the business for 20 years in this city, the junior half that time. With an ample capital for reasonable requirements the firm secured the premises at No. 175 Liberty Street, consisting of one three-story brick building, with basement, the whole of which is occupied by the house for a storage and arrangement of one of the most complete and elegant assortments of the Wall Paper and Costly Hangings to be found in this city. From the cheapest paper at 8 cents per roll to that at \$15 this house can supply all grades, together with every variety of decoration and ornament, suitable for modern and antique styles of furnishing. Five or six hands are employed in the business, which extends not only to the city and environs, but over a large part of Western Pennsylvania and adjacent States. Carrying a stock valued at over \$10,000, the firm afford the most admirable facilities for a selection in all grades, styles and prices, and have established a reputation for integrity and general reliability that tends to make all dealings with them of the most satisfactory character.

S. BOYD & CO.—*Looking Glasses, Pictures and Frames, No. 100 Wood Street.*

The headquarters in Pittsburgh for Looking Glasses, Frames, Fine Pictures, Elegant Engravings and Works of Art, is at the establishment of S. Boyd & Co., No. 100 Wood Street. This House was founded in 1865 by Boyd, Murray & Fawcett, who were succeeded by Boyd & Murray, and in 1874 the firm became S. Boyd & Co. Their large and spacious salesrooms at the number named are 23x85 feet, and they occupy the entire four stories and basement, carrying a stock ranging in value from \$16,000 to \$19,000 and employing here ten assistants. Their stock comprises a large line of elegant Plate Glass Mirrors, Fine Engravings, Chromos, Lithographs, Photographs, Statuettes and articles of virtu. Their factory is located at the corner of Ferry Street and First Avenue, occupying one floor 40x80 and employing ten workmen. They manufacture the finest description of Mirror Frames and also those of a cheaper and more common grade, employing a different set of hands on each kind. They also manufacture every description of Cheap Frames, and have pushed their business in this department to such an extent that their trade reaches every portion of the country. They sell largely to the trade in Louisville, Cincinnati, St. Louis, Chicago and other Western cities, and their trade in the East is even larger than in the Western States. The manufacture of Cheap Frames and Fine Walnut Mirror Frames is a specialty of this House. At their salesrooms the Fine Art Department is the most noticeable specialty and the display of Fine Engravings cannot be excelled. Mr. S. Boyd was born in Washington County, Pennsylvania, in 1821, and came to Pittsburgh in 1845. Mr. D. S. Boyd is also a native of Washington County, and Mr. J. B. Nevin, the junior member of the firm, was born in Beaver county of this State. This is one of the most reliable and straightforward firms in our city, well deserving the very large patronage which they enjoy.

A. J. STEELE,—*Wagon Maker, 58 and 60 Anderson Street.*

Mr. Steele commenced the business in which he is now engaged in 1862, with a capital of only \$125. This he has increased until he now constantly keeps on hand a stock of \$1500 to \$2,000 and does an annual business of from \$6,000 to \$10,000. He occupies a building 41x80 feet and three stories high, with good yard attached, and employs seven men in the several departments, with a pay-roll of \$52 per week. Every description of Wagons, Carts, Drays and Spring Wagons, Wheel Barrows, Trucks, Skids, etc., are here manufactured in the best and most durable manner, and, at the same time, particular attention is paid to Repairing and Job Blacksmithing. His trade is local.

Mr. Steele was born in Jefferson County, Pennsylvania, April 7, 1835, and came to this city nine years later. He began business on Washington Street, Pittsburgh, in May, 1862. He is widely known and esteemed.

WHITE, ORR & CO.—*Dry Goods, No. 35 Fifth Avenue.*

One of the oldest Retail Dry Goods Houses in the West was established in 1823 by Geo. R. White, Esq., now deceased, and continued at the present time under the above title by Messrs. James White and R. Leslie Orr, the latter being the eldest son of Mr. Robert Orr, also deceased, formerly the active partner in the House and well-known as being a man of great ability, possessed in a remarkable degree with the highest sense of personal and commercial honor.

No House in the same line of business stands higher than Messrs. White, Orr & Co., for the character of its trade and the uniformly excellent quality of the goods in which they deal—especially in Linens, Dress Goods, Hosiery, White Goods, Silks, Cloaks and Shawls, Curtains and Domestic Fabrics, etc. The premises occupied by the firm are perhaps the most spacious and elegant in the city—centrally and prominently located, every convenience and facility is afforded buyers, who by the extent of the annual trade freely attest the esteem in which this House is held.

GEO. A. KELLY & CO.—*Wholesale Druggists, Cor. Wood St. & First Ave.*

As an important factor in the growth and general progress of this city, the Drug trade has played no insignificant part, as might be illustrated by the detailed history of the above house, which was established during the infancy of our commerce, half a century ago, by B. A. Fahnestock & Co., who were succeeded in 1872 by the above firm, composed at present of Geo. A. Kelly, Capt. Jehu P. Smith, (Estate of) and Van R. Smith.

The business premises occupied by the house are located on the corner of First Avenue and Wood St., and consist of a large four-story double brick edifice, admirably situated and adapted for the trade. The departments are numerous and embrace Paints, Oils, Varnishes, Dye-Stuffs, American and Foreign Chemicals, with a large and complete assortment of Drugs and Druggists' Sundries, Perfumery, &c., &c., aggregating a stock of the average value of \$100,000 with a business that requires the employment of 19 hands, and a weekly disbursement for salaries of over \$300. Mr. Geo. A. Kelly is a native of this city, where he was born in 1832; at a very early age his education was commenced in the Drug business, which he acquired thoroughly in all its branches, and with which he has been intimately identified all his life. Upon succeeding the firm of B. A. Fahnestock & Co., he became associated in business with Capt. Jehu P. Smith, who dying several years subsequently, his son Van R. Smith, who had been engaged in the house since 1872, was admitted to an interest in 1876. Prominent in every public movement that seemed to promise a greater degree of prosperity and commercial importance for the Iron City, Mr. Kelly has achieved a reputation for business vigor and intellectual aptitude, that has given great weight to every undertaking in which he has been concerned. As a firm Geo. A. Kelly & Co. stand, in its resources, magnitude of its transactions and high business qualities, at the head of the trade in this city, justly esteemed for those attributes, liberality, integrity and thrift, which invariably conduce to solid and lasting success.

B. TIEGEL,—*Merchant Tailor, No. 53 Smithfield Street.*

For more than a decade, the name and fame of Mr. B. Tiegel, as a Fashionable and Reliable Merchant Tailor, has been familiar to the citizens of Pittsburgh and Western Pennsylvania, where he has a large and profitable business acquaintance. And not alone throughout this immediate section has his reputation extended, for his customers may be found in nearly every Western State and Territory. From the mines of Colorado, the growing cities of the far West, even unto the sunny slopes of the Pacific Ocean are orders received for garments of Mr. Tiegel's manufacture. Strict attention to business, undeviating honesty, and the artistic excellence of his fits, are undoubtedly the secrets of his success in business.

Mr. Tiegel is a native of Breslau, Province of Silesia, Prussia, and was born in the year 1845. At the age of nine years he came to the United States, and in 1865 he removed to Pittsburgh, where he has since resided. In 1863 he commenced business for himself, on a comparatively moderate scale, and to-day his Establishment will compare favorably with any similar one in the United States. He employs regularly from six to fourteen experienced workmen, his weekly pay roll at times amounting to nearly two hundred dollars. Carrying a carefully selected stock of the best materials of from \$4,000 to \$5,000 in value, his annual trade amounts to nearly twenty thousand dollars. He occupies the entire building (four stories), 20x30 feet in dimensions, at No. 53 Smithfield Street, besides having a considerable portion of his manufacturing done by outside parties.

CAMPBELL, WILLIAMSON & DICK,—Dry Goods, 83 & 85 Fifth Ave.

This is the leading house in Pittsburgh doing an exclusively cash business in the Dry Goods line. It was established in 1871 by the present proprietors under the title of the "People's Store," a name which has since become widely known and deservedly popular throughout the two cities and the adjoining territory. The members of the firm are: Mr. William Campbell, who was born in Perthshire, Scotland, and came to the United States in 1865 and located in Pittsburgh in 1871; Mr. Andrew Williamson, a native of Fyfeshire, Scotland, born in 1838, a resident of the United States since 1865, and of Pittsburgh since 1871; Mr. Peter Dick was born at Paisley, Scotland, and came to America at the age of eighteen, and located in Pittsburgh eight years ago. They occupy two floors of the spacious "Masonic Hall Building," Nos. 83 and 85 Fifth Avenue, 50x110 feet, and carry on a General Wholesale and Retail Business in Dry Goods, Notions and Carpets. Their stock, which is very full in all its departments, comprises every description of goods pertaining to their line, and is estimated at from \$70,000 to \$100,000, with an annual trade exceeding \$200,000. They employ from twenty-five to thirty clerks and assistants, and in the Winter season manufacture large quantities of Ladies' Cloaks and Suits. In the Summer they manufacture Ladies' Dresses in great variety. Their regular trade is principally derived from the two cities and the towns of Pennsylvania and Ohio within a radius of two hundred miles, with considerable transient business from all parts of the Union.

E. P. ROBERTS & SONS,—Jewelers, No. 16 Fifth Avenue.

One of the best known and oldest establishments of its kind in Pittsburgh is that of Messrs. E. P. Roberts & Sons. Established thirty years ago by J. M. Roberts, Esq., whose demise in 1866 occasioned a change to the present firm. No house in this community has enjoyed a more deserved popularity. The individual members of the firm are E. P., S. F. and C. W. Roberts, all of whom give their personal attention to the business, which embraces a manufacturing department where every class of work is elegantly and artistically made to order. The stock, valued at \$30,000, is not so remarkable for its extent as the exquisite taste and judgment evinced in its selection. In the matter of Silver and Silver Plated Ware, Diamonds, Jewels, Ornaments, and especially fine Clocks and American Watches, this house can perhaps offer facilities to buyers, in the way of selection and price, not to be duplicated west of New York. Five assistants are constantly employed, and the trade, amounting to \$10,000 annually, extends through Pennsylvania and adjacent States. Messrs. E. P. Roberts & Sons are all natives of Pittsburgh, and have done no small service in promoting the mercantile credit and thrift of the Iron City.

WM. Mc. C. DRAVO,—Oils, No. 99 Water Street.

The subject of this brief sketch was born in the City of Pittsburgh in 1834, and has, in a measure, grown up with the business of the city, and been for a number of years connected with the leading branches of the city's industries; having formerly been connected with the coal trade, and since 1876 in his present business of Wholesale and Retail Dealer in Lubricating and Signal-Light Oils. These are manufactured for the special trade of this house and are always perfectly pure and reliable, and of such a quality as to have built up for the house of W. Mc. C. Dravo an influential reputation with the river trade which forms the chief patronage of this house. To dealers throughout the city, and the entire country, as well as to those engaged in the river traffic, the Editor respectfully calls attention to the full line and choice Oils of this house, as I. X. L. Engine Oil, Head-Light Oil, Carbon Oil, Natural Lubricating Oil, Pit Car Oil, &c., as well as to his department of Engineers' Supplies in Machinery Grease, Belt Stuffing, and White and Red Lead, Colors and Varnishes, Lamp Globes and Wicks, etc., all of which they will find at the lowest market prices.

C. YEAGER & CO.—Wholesale Dry Goods, &c., No. 110 Market Street.

Established forty years since, by Christian Yeager, the senior partner of the present firm, this house is perhaps as intimately connected and identified with the development and prosperity of Pittsburgh as any commercial enterprise in the city. A native of Lancaster, Pa., Mr. Yeager settled in this community in 1855, and in 1839 began his present business, in a small way, with but a very limited capital in cash, but generally endowed with business ability of a high order, energy, economy and integrity, and with these as his main dependencies he founded the present house. In a history extending over nearly half a century, no house can exhibit a more untarnished career, with the rapid growth of the city, its trade prospered, and for over thirty years it has been a direct importer of every class and grade of Fancy Goods, Toys, Notions and Fabrics, its sales having reached as high as \$360,000 per annum. As an enterprising, but remarkably conservative man, Mr. Yeager has always been the custodian of numerous public and private trusts, and is at the present time President of the Pennsylvania Insurance Co., a Vice-President of the Dollar Savings Bank, Director of Mechanics' National Bank, member of several Benevolent Societies, and more or less interested in the Reformatory Institutions of the State.

Dealing largely in Dry Goods, Fancy Goods and Hosiery, this house pursues the policy of having no traveling salesman, a plan which if generally adopted would add greatly to the profit of producer, dealer and consumer. For this and other reasons, the results of a long and varied experience, the firm is prepared to offer advantages to the trade hardly to be duplicated in this country, and a stock of goods that for extent and variety would be impossible to match in the State.

H. C. Yeager is the company of the house, and has under his special charge the books and clerical department. The premises of the firm are ample and consist of the five story brick building No. 110 Market Street, 21x80 feet, and stocked with goods from basement to roof. Nine assistants are employed here to aid in the conduct of the business which ranges over Pennsylvania, Ohio and West Virginia. In the consideration of the community no house takes a higher rank, or is more deserving of the success which it has achieved, or the spotless reputation it bears.

E. J. WARING & CO.—Star Oil Works, Office, No. 49 Fifth Avenue.

Refinery, Bennett's Station, W. P. R. R.

Eleven years ago this business was established by Messrs. Lafferty & Waring. Subsequently, in 1868, Mr. Lafferty died and was succeeded by J. H. Ralston, Esq., and the firm became Ralston & Waring, till his death in 1872, when the above title was assumed. When the firm first began business, they did so with a limited capital, which, however, was enlarged from time to time until the capacity of the works now reaches 26,000 barrels crude oil, monthly. Conveniently located, on the Allegheny River near Bennett's Station, W. P. R.R., the works consist of five buildings, with numerous tanks, stills, etc., which occupy five acres of ground, and afford every facility for the business. The average trade of the concern is about \$300,000 per annum, and the monthly pay roll, when in full operation, will amount to from \$1,600 to \$1,800, and a force of forty-five hands employed. Mr. Waring is a native of Saratoga Co., New York, and is now thirty-one years old. He came to Pittsburgh in 1865 and has since been intimately identified with the oil trade. Possessed of no ordinary business ability, as well as a high sense of personal rectitude, his great success is regarded as being as natural as it is well deserved, and entitles him fairly to occupy the elevated position he has achieved in commercial and social circles.

KORNBLUM,—Optician, No. 25 Fifth Ave.

Though having been a resident of Pittsburgh for only three years, Mr. Kornblum has already established a reputation of being the best optician and most capable dealer in philosophic instruments of any man in this city. A native of Austria, he acquired his profession under the best scientific masters of his vocation in Vienna and Europe, and since his residence in America for 16 years has devoted himself entirely to the attainment of perfection, in his chosen profession, with the most signal success. His wide experience as an optician has been followed by a reputation that places him in correspondence with the most distinguished men from all sections of the country, who desire to avail themselves of his marked proficiency. Upon every point relating to the eye and its diseases and defects, he is thoroughly posted, and by a merely superficial observation gauges the strength of the organ in any case and selects lenses of the appropriate power. At his present location, to which he has just removed, will be found a complete and carefully selected stock of Spectacles, and every variety of rare scientific and philosophic instruments, the work of the best makers in this country and in Europe. Those at a distance may be assured that any orders by mail or enquiries, will receive prompt and intelligent responses, and further that any business placed in the hands of Mr. Kornblum, will result in the most satisfactory manner and a continued appreciation of his unquestioned abilities.

D. W. C. CARROLL & CO.—Fort Pitt Boiler, Bridge and Tank Works. *Corner Third Ave. and Liberty St. and Second Ave. and Short St.*

The history of this house has been so intimately connected with the development of the trade of Pittsburgh, that no record of the industries of this community would be complete that did not take cognizance of the firm of D. W. C. Carroll & Co. and its predecessors. Established in 1843, the business was founded by M. Stackhouse, Esq., succeeded by H. Busha & Co., who preceded C. Gutendorf & Co., who gave place to Carroll and Snyder, who were succeeded by the present proprietors, D. W. C. Carroll and R. G. Jones, under the caption title, in 1872; the business premises and works of the firm occupy an entire square fronting on four streets, Short and Liberty Streets, and Second and Third Avenues, consisting of a substantial brick building, ranging from one to three stories in height, well supplied with the most approved machinery, consisting in part of one 45 horse power engine with two boilers of 40 and 15 horse power respectively, 10 foot plate rolls, 2 pairs power shears for cutting the heaviest iron plate, 9 power punches for boiler plates, one plate planing machine, 8 vertical drills and many other pieces of ingenious mechanism and tools proper to the trade, making in all the best equipped works in the city, or west of the Allegheny Mountains. The extent to which the business of this concern has reached is not limited to the United States, but embraces Mexico, much of South America and Canada, finding customers in fact in nearly all parts of the world.

In the manufacture of Steam Boiler and Heavy Plate, Iron Bridges, Buildings, Oil Tanks, Gas Holders, and Sheet Iron Work generally, this House has few rivals and no superiors. The first Oil Refining appliances, Tanks, Stills, etc., ever manufactured in this city, were constructed by this establishment, which still maintains a celebrity unequalled for this class of work. The iron dredge boat "C. W. R. Bailey," used by Capt. J. B. Eads in his excavation of the Mississippi Jetties, was built by this firm, who have, perhaps, made more steamboat outfits in their line than any other concern in the business. For some years the manufacture of boilers for agricultural machinery has engaged the attention of the House as a specialty, their admirable facilities insuring work of a high order of excellence in this department, which is rapidly assuming greater importance.

The firm employ seventy-five men in the business and do a trade that approximates a quarter of a million dollars annually. Mr. C. H. Parker, the manager, is a gentleman of wide experience, a native of Providence, R. I. and formerly engineer of the National Bridge Works, of Boston, Mass. The members of the firm are both natives of Pittsburgh and have always resided here, intimately involved in the iron trade, and, as a firm, it is not too much to say that in every respect it stands at the highest point in the estimation of its cotemporaries and the commercial world at large.

HEAD & McELROY,—Produce Commission Merchants, No. 249 Liberty Street. *Dealers in Butter, Eggs, Cheese, Flour, Grain, Seeds, Fruit, Vegetables &c.*

This house refers by permission to the Hon. Robt. Sidell, Mayor of Pittsburgh, Messrs. Arbuckles & Co., wholesale Grocers, Geo. S. Head, Esq., President of Second National Bank, Pittsburgh. Head & McElroy began business in their present location, April, 1876, succeeding the old and well-known Wholesale Grocery House of Head & Metzgar. They occupy the fine four-story, iron-front warehouse No. 249 Liberty Street, the location being the choicest for this style of business in the city, the largest and most complete warehouse used in the produce commission business in Pittsburgh, having a depth of 120 feet, four lofty stories, a splendid cool cellar, steam engine, two elevators, one of which is operated by steam, two offices with speaking tubes and telephone, and all the modern appliances for the careful and prompt despatch of business. With these facilities and a full force of efficient hands, all business is transacted promptly, accurately and intelligently, and upon sound business principles. Head & McElroy, during the three years in which they have been in business, have built up a trade that will not suffer by comparison with the oldest established house in the trade in Pittsburgh. The plan pursued by this House has been to sell without delay all consignments and to make prompt returns therefor, which, judging from their success, seems to commend itself to the favor of shippers as the correct method of doing business. They also make liberal advances upon non-perishable goods, where it is desired. Any one having business in this line can feel assured that it could not be entrusted to safer hands.

J. B. KAERCHER,—Hardware and Cutlery, 73 Market Street.

The Hardware House of J. B. Kaercher was established at the above location in 1877, and from a comparatively moderate beginning has, within the past two years, met with encouraging success, and he now transacts a business of about \$12,000 per annum. Mr. Kaercher occupies three floors of the building at No. 73 Market Street, 13x60, and carries a general line of Hardware and Cutlery, embracing all the leading and staple articles known to the trade. His business is principally local. Mr. Kaercher is a native of Pittsburgh, having been born in 1859, and has had six years experience in the business.

BROWN, MURPHY & FERTIG,—Sewer-Pipe, Cement, etc., *No. 65 and 67 Sandusky Street, Allegheny.*

The firm of Brown, Murphy & Fertig was established January 1, 1878, as successors to Mr. Charles Brown. Their office and yard are located at Nos. 65 and 67 Sandusky Street, which is the Headquarters in Allegheny for the celebrated Akron Sewer Pipe. They are also wholesale and retail dealers in all the standard brands of Hydraulic Cement, Terra Cotta Chimney-tops, Hot and Cold Air Flue Linings, Chimney Flues and other Terra Cotta Goods, Fire Brick, Grate Tile and Ground Fire Clay, White Sand, Lime, Plaster, etc. The building occupied by them is a three-story structure, 30x100, with a commodious yard adjoining. They carry an average stock of about \$3,000 and transact a business in the two cities and surrounding towns which is principally local, amounting to \$15,000 per annum. The individual members of the firm are Charles Brown, J. G. Murphy and Frank Fertig.

MILLER, FORSE & CO.—Wholesale Liquors, No. 253 Liberty St.

As a representative House in the line of one of the largest commercial and manufacturing industries of this city, and, at the same time, one of the oldest, the firm of Miller, Forse & Co. are entitled to more than brief mention in a publication of this description. Founded in 1831, or nearly half a century ago, by Wm. Miller, Esq., who began business upon a capital of \$1,000, the fortunes of the House have been as intimately connected with the rise and development of the industries of Pittsburgh as any concern in the community. For many years the business was conducted by Mr. Miller alone, and during that period he not only established a reputation for honor and responsibility that ranked him first among the pioneer business men of the city, but laid the foundations of a great monetary success.

In 1866, by the death of Chas. Ricketson, the style of the House was changed to Wm. Miller. In 1869, however, the firm title became Wm. Miller & Co., remaining as such till 1872, when Mr. Miller, having accumulated a fortune estimated to be not less than \$1,000,000, dissolved the partnership by his demise and the present firm shortly succeeded, being composed of Morris Miller, Esq., nephew of Wm. Miller, Esq., and Wm. H. Forse, who conduct the business upon the same principles, respecting those traditional rules of the House, upon which its prosperity has hinged so largely.

Having just removed to the four-story, iron-front edifice, 23x125 feet, at No. 253 Liberty Street, the firm are perhaps better prepared to afford those facilities to the trade for which they have always been noted—especially in the line of Old Monongahela Rye Whiskies, the celebrated "Cabinet Whiskey," Pure Imported Wines, Brandies, Ales, Cigars, etc. Messrs. Miller, Forse & Co. can not be surpassed either in the quality of goods or fair and liberal terms. With a trade extending to almost every State in the Union, and aggregating not less than \$125,000 per annum, and steadily increasing, this House may be regarded as a favorite among those retailers who demand a brand upon which to rely with implicit confidence. Such a brand is that of this firm and to the scrupulously preserved purity of their wares may be traced the signal success of their operations.

THEOPHILUS ROLLER,—Wholesale & Retail M'facturer of Parlor Furniture, No. 122 Ohio Street, Allegheny City.

The goods manufactured at the above-mentioned establishment have attained a well-merited reputation among the residents of both cities for their beauty of design and elegance of finish. Being almost the only house in the city which makes a specialty of Parlor Furniture, and employing only experienced workmen, Mr. Roller enjoys a trade of \$15,000 to \$18,000 per year, and carries a stock valued at \$16,000. The business is divided into three departments, comprising the salesroom at No. 122 Ohio Street, the manufactory, on Cedar Avenue, which is 24x150 feet, and where twelve men are employed at salaries aggregating \$100 per week, and the warehouse on Avery Street. The proprietor, Theophilus Roller, was born in Germany in October, 1836, and came to this country in March, 1859. In 1873 he began business at his present location, with a capital of \$2,000, which he has since increased to \$5,000. Mr. Roller, being a practical mechanic, has introduced several valuable improvements in his business—among other things he has invented and patented a reversible spring mattress, which is well known among all dealers in furniture, and which has a large sale.

MRS. T. A. ROLLER,—Millinery, Dress & Cloak Making, 122 Ohio St., Allegheny.

One of the most extensive Millinery and Dress and Cloak Making establishments in Allegheny City is that of Mrs. T. A. Roller at No. 122 Ohio Street. The building itself is a large one, measuring 18x100 feet, and contains ample space for the accommodation of the three departments of the business, viz:—Dress Making, Cloak Making and Millinery, which require the services of thirty hands. Besides these, there are three salesladies employed in the store proper, and the pay-roll weekly reaches the sum of \$140. The proprietress, Mrs. Roller, was born in France, Feb. 22, 1835, and came to this city in 1851, where, in 1861, she erected the building which she at present occupies. At that time her capital was only \$50, but by the use of those talents for her business which are peculiar to her countrywomen, and by the exercise of good taste and judgment in the selection of designs, she has since increased it to \$20,000, and has built up a trade throughout the two cities and surrounding country which amounts to \$20,000 annually and requires the keeping on hand of a stock valued at \$8,000. Her assortment of Ribbons, Flowers and Straw Goods is one of the best in either Pittsburgh or Allegheny City.

ARTHUR KIRK,—Powder, and Miner's Supplies, No. 19 Seventh Street.

Mr. Kirk was born in Scotland in 1825, but has been a resident of Pittsburgh since 1839, and prominently identified with the business interests and material prosperity of this city for many years. Although not a politician, Mr. Kirk is a public-spirited gentleman whose name has frequently been connected with public affairs. He established the business in which he is now engaged, as dealer in Powder, Quarrying and Miner's Supplies, etc., in 1867, but had previously been actively engaged in mercantile pursuits for over twenty years. His trade has steadily increased, as may be seen from the fact that during the first year of business he disposed of only two hundred packages, while up to the commencement of the panic ten thousand packages were disposed of annually. He occupies a large and conveniently arranged office at No. 19 Seventh Street, employing four assistants, at a weekly expense of about \$40.00. His trade is in the State of Pennsylvania, Ohio and West Virginia. His past honorable business career is a sufficient guarantee for a successful future. In the same office with Mr. Kirk is N. G. Ayres, his son-in-law, who is the authorized agent for the well-known Austin Powder Company.

JOHN L. DAWES, SONS & CO.—Druggists' Glassware, No. 81 Third Avenue.

This house was established in 1864 by John L. Dawes, Sr., being the pioneer of this business west of the Alleghenies. Later, E. L. Dawes and John L. Dawes, Jr., were admitted, and now form the only firm in Pittsburgh engaged in manufacturing Glass, Labels for Druggists, and making a specialty of supplying that trade with glassware and general sundries. The premises occupied by the firm are situated as above, where eight assistants are employed in the manufacture of "Dawes' Patent Label," which for neatness, durability and economy has no rival in the market, and has created a demand throughout the United States and Canada. Mr. Dawes, Sr., has been a resident of this city for nearly forty years; he has been identified in many ways with its progress and development. His sons are natives of Pittsburgh; they have a thoroughly detailed knowledge of their business, and are constantly making improvements that tend very greatly to its increase, and advantage. The house always carries a large stock of Labels and Glassware, which are sold by sample and manufactured to order, and it is not saying too much to remark, that occupying in a certain sense the position of a monopolist, this fact would never be suspected from the liberal and square manner in which the business is conducted.

ROSENBAUM & CO.—*Trimmings, Millinery and Notions, 91 Market Street.*

The largest and best known house in Pittsburgh engaged in this line of business is that of Rosenbaum & Co., who have recently removed their quarters to the elegant and spacious sales rooms, No. 91 Market Street, where they occupy three floors, each 18x90 feet, completely stocked with a fresh, fashionable and elegant assortment of Millinery Goods, Trimmings and Notions. The house was founded eleven years ago by Mr. Rosenbaum and another gentleman, and since that time the business has steadily and rapidly increased, until the sales now reach the round sum of \$120,000 per annum. They carry a stock of not less than \$40,000, and are in receipt of all the latest styles and designs in Foreign and Domestic Millinery and Trimmings simultaneously with their appearance in the New York and Philadelphia markets. Their openings are attended by the elite of the two cities and surrounding towns, and this house has come to be justly celebrated by the ladies as the headquarters for fashionable and elegant styles. Messrs. Rosenbaum & Co. employ the services of twenty-five clerks and assistants in their Establishment, with a weekly pay roll amounting to about \$200. Mr. Rosenbaum is a native of Germany, but has resided in this country for about sixteen years.

B. L. H. DABBS,—*Artist Photographer, Cor. Market and Liberty Sts.*

Mr. Dabbs commenced business in this city in 1861 and opened rooms for the sale of Photographic Materials. He was very successful and had a large trade, extending through several States. Becoming interested in the art of Photography and finding he had both inclination, taste and knowledge for it, he opened rooms in Allegheny. Almost at once he took the lead in that branch and has kept that position ever since. His thorough and practical mercantile education has been greatly in his favor, giving him the business sense of proving by actual demonstration that as good pictures could be made in Pittsburgh as anywhere in the world; he has been going on, steadily improving from the very commencement of his business career. In 1863 he removed to this city, as he found that his trade increased faster than the facilities he was possessed of in Allegheny would keep pace with, he therefore fitted up a gallery, studio and reception rooms on Sixth street, such as had never been seen before in this locality, and which were abandoned in 1875, only to take possession of his present premises, and now has without any question as complete facilities for carrying on his business as can be obtained. The rooms which he now occupies were built according to his own plans and ideas, consequently they are just what are needed. His past experience taught him just what was most desirable, he has one of the finest plate glass skylights in the United States. He always examines carefully into everything new that is ever introduced in Photography, and if he considers it practicable and any improvement on what he has hitherto used, never fails to adopt it. Acting on this principle he bought the right for the making of the new permanent prints by the Carbon process, and through this method he has been most successful in obtaining beautiful results in porcelain pictures. There is the most pleasing variety in his pictures, his positions are all characterized by an ease and grace which very few photographers can obtain. We consider Mr. Dabbs' greatest success lies in this, he studies the sitter and aims to give to each one such a position as will best suit them, and this he almost seems to know by intuition. He takes a pride and a great pleasure in his work, which materially helps him in the good results which he obtains.

F. SOEVYN,—*Merchant Tailor, No. 238 Penn Avenue.*

Mr. Soevyn is a practical cutter and has had over thirty years experience as a Tailor, thus being enabled to not only understand every detail of the business, but to give perfect satisfaction to his customers. He has been established in his present line for about five years, during which time he has secured the patronage and confidence of many of the leading gentlemen of Pittsburgh, in all cases giving the most undoubted satisfaction, and establishing a reputation second to none engaged in the same business. He keeps on hand a carefully selected and fashionable stock of the best foreign and domestic fabrics for gentlemen's wear, from which to select, and his garments are all made up in the most thorough and workman-like manner. His business is exclusively Custom Work, and his specialty is in the manufacture of fashionable dress and business suits at prices to suit the times.

JOHN SEIFERTH,—*Wines and Liquors, Nos. 27 and 29 Market Street.*

Mr. Seiferth has been engaged in his present line of business in the old First Ward for the past twenty-one years, and at his present location for sixteen years. He is a well known and highly respected business man and a prominent citizen of the Smoky City. He now occupies the three story brick warehouse, fronting on Market street 37½ feet and extending back on Second avenue 80 feet, where he keeps a large and finely selected stock of pure Wines and Liquors, both Imported and Domestic. He is an extensive rectifier and carries on both a wholesale and retail business, amounting to not less than \$25,000 per annum, employing three hands, and making a specialty of Pure Unadulterated Wines and Liquors for family use. Mr. Seiferth has in stock some of the oldest and purest Liquors to be found in the city, and his trade, which is both local and country, is of the very best class. He was born in Germany in 1829, but has for many years resided in Pittsburgh and been identified with the mercantile and spiritual welfare, being a prominent and consistent member of the German Lutheran Church.

LASHEL & WALTER,—*Commission Merchants. &c., 54, 56 & 58 Ferry St.*

These gentlemen are engaged in the business of general Commission Merchants and dealers in Flour, Grain, Mill Feed, Hay, Produce, &c., and pay special attention to the buying and selling of Horses. They have good stabling in connection with their establishment for the accommodation of patrons. The business was established in 1875 by Mr. Murry Trimble, who was exclusively in the feed business and was succeeded in 1879 by the present firm. They carry a stock of over \$2,000, while their annual business will amount to many thousands of dollars. They occupy the premises 60x60 feet at the numbers above named. The members of the firm devote their personal attention to the business and employ one assistant. Their sales are principally made in the city and surrounding towns, and they receive consignments from almost every section of the country. Mr. G. A. Lashel was born in Pennsylvania in 1845 and is an experienced business man of many years standing. Mr. J. T. Walter, the junior member of the firm, takes no active part in the business, but his son, E. J. Walter, fills that position with ability, he having a long experience in the Commission business before embarking in the enterprise in which he is now engaged.

McELROY & CO.—*Brooms, Brushes, Paper, Paper stock, &c., 80 & 82 Third Ave*

This firm do a business of from \$80,000 to \$100,000 employing in their manufacturing and assorting departments 35 hands, who, with the aid of the best machinery to assist in making "hand-made" Brooms and Brushes, turn out the best work known to the trade. Hugh McElroy, one of the firm, is senior partner in the Choshocton Paper Co. of Choshocton, Ohio; whose mill manufactures the Paper handled by McElroy & Co. and deal largely in Rags and other Paper stock, etc. The firm is one of the most solid of the city and is at all times reliable.

PITTSBURGH TAR CHEMICAL WORKS.—H. A. Clifford & Co., No. 170 Rebecca Street, Allegheny City.

Few persons, not familiar with the business, have any conception of the variety of articles manufactured from that, to many, repulsive looking and smelling material known as Tar. The Pittsburgh Tar Chemical Works is the only manufactory in this city of this description of goods. The Works were established by D. Hostetter, Otto Wnith, and A. Herz, with an original capital of \$10,000, which they increased to \$25,000. The present proprietors are H. A. Clifford and Emil Schalk, doing business under the firm name and style of H. A. Clifford & Co., and they increased the capital to \$40,000. The premises occupied by this firm are 145x300 feet in size, containing five buildings and four sheds. The dimensions of the buildings are respectively as follows: 40x80 feet, 30x60 feet, 20x30 feet, 20x30 feet and 18x50 feet. Their laboratory and works are fitted with all the requisite appliances and machinery for the distillation and manufacture of their various products. The works require one 5-horse power engine and one 8-horse power boiler, and furnish employment to eight hands with a monthly pay roll aggregating about \$425. They carry a stock of about \$25,000, and their annual business will reach, if not exceed that amount. Their trade is principally local although they ship goods occasionally to different portions of the United States. The works will compare favorably with similar establishments in St. Louis and Chicago manufacturing the same class of goods. Among the various articles for which they have established a high reputation, we may mention, Roofing Cement, Paving Cement and Composition, Dead Oil, Naphthaline, Crude Benzole, Pure White Rectified Benzole, Iron Varnish, Cotton Tie Varnish, Crude and Refined Carbolic Acid, Carbolate Powder, "Universal Disinfectant" and Oil Myrbane, an article used extensively for perfuming Soaps in place of Almond Oil.

Mr. H. A. Clifford is a native of New Hampshire and came to this city in 1874; and his son, Mr. Charles W. Clifford, is book-keeper and superintendent of the clerical and corresponding department.

HODGE, GODDARD & CO.—Wholesale Jewelers, No. 43 Fifth Avenue.

No history of the Industries of Pittsburgh would be complete without frequent reference to the trade in which the above house is engaged, and in which it has achieved so prominent a position. Established in 1864 by Messrs. Scott & Hennegen, that firm was shortly succeeded by Scott, Hennegen & Co., who were followed by Scott, Barrett & Co., then J. T. Scott & Co., and finally by the present firm, composed of Messrs. W. C. Hodge, Geo. E. Goddard and E. W. Hill, making a specialty of American Watches. They represent the Waltham, Springfield, and Elgin Watch Cos., whose superb products are known for their accuracy over the entire world, and are remarkable for the perfection of their construction and matchless time keeping qualities, being regarded as absolutely flawless in the latter respect.—As Importers, Jobbers, and Manufacturers of Jewelry, Clocks, Watches, Silver and Silver Plated Ware, Dinner Sets, Tea Sets, etc., with every variety of goods suitable for all occasions, this house offers facilities to the trade that are unsurpassed between Philadelphia and Chicago. As an evidence of this fact may be cited the remarkable growth of a business, which of a most limited character at its inception, has reached the proportions of one of the largest houses in the West. Exclusive of the individual members, each of whom takes an active part in the business, the firm employ four salesmen, two of whom are constantly on the road, one skilled engraver and designer, one watch-maker, two jewelry-jobbers, and several other assistants. Engaged exclusively in Jobbing, the trade of this house extends through Western Pennsylvania, West Virginia, Ohio and Indiana, its products being highly regarded in the trade for beauty and originality of design, special attention having been directed to perfect all goods in these respects. As a firm, Messrs. Hodge, Goddard & Co. stand at the head of the Wholesale Jewelry trade in this city, carrying the largest stock and doing the most extended business, and are regarded with esteem and consideration by all with whom they come in contact. Their business policy is just and liberal, resulting naturally in the marked success that has attended their operations.

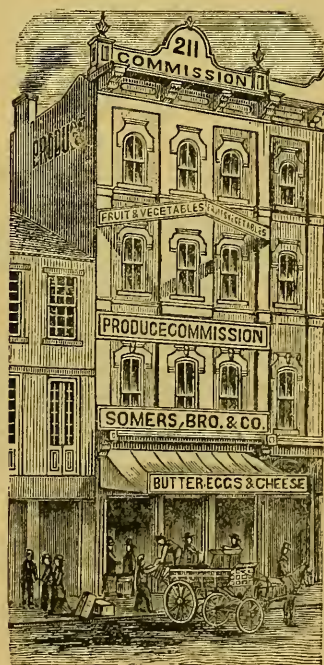
SOMERS, BROTHER & CO.,

211 LIBERTY STREET,

Produce Dealers and Shippers,

and General Commission Merchants.

There are few kinds of business which have the capacity of a wider range and scope than the business in which Messrs. Somers, Bro. & Co. are engaged. These gentlemen commenced business at No. 177 Liberty Street, in 1876, with a comprehensive knowledge of its responsibilities and requirements, and have, by their straightforward business transactions, established a flourishing trade, and, at the same time, won the confidence of all with whom they have had dealings. The gradual increase in their business made it necessary to secure more convenient quarters, and they subsequently removed to No. 202 Liberty Street, and later, again to enlarge their business space and facilities, to their present location, No. 211 Liberty Street. Their transactions embrace a General Produce and Commission business, receiving and disposing of Consignments of Produce, Fruits or Dairy Products, as well as Buyers and Shippers. We know of no house in this city to whom we could more cordially commend country dealers, nor any whose facilities are better for the disposition of any products placed in their hands. They occupy four floors and basement of a capacious building, employ seven persons in the different departments of their business, and their annual transactions will reach at least \$100,000. They receive consignments from all parts of Ohio, Indiana, Maryland, New York, West Virginia, Kentucky and this State, with sales principally in this city and vicinity and shipments to Eastern cities. The firm is composed of J. L. & Charles Somers, men of excellent business qualifications, formerly of Beaver County, this State.



JOHN T. NATCHER,—*Carpenter and Builder, Nos. 125 & 127 First Avenue.*

John T. Natcher was born in Carlisle, Pennsylvania, in 1847. He commenced the trade, which he has followed in this city with such signal success, in his native town in 1863. Four years after he came to Pittsburgh, where he has resided since that time. He occupies a building 30x52 feet, built on a lot 30x160 feet, reaching from First to Second Ave., and has an annual business of from \$50,000 to \$75,000. He furnishes steady employment to from 40 to 50 hands, at an average salary of \$1.75 per diem each. Through the city and vicinity are landmarks of his mechanical ability, some of the finest structures of architectural skill are pointed out as erected by him, viz.: "The First Presbyterian Church on the south side," "South Side City Hall and Market House," "St. Clair U. P. Church" at Mount Lebanon, and many others might be mentioned. Among the many prominent firms of our city, to whom he has given satisfaction in building and repairing, we may mention a few as follows: A. Garrison & Co., Robison, Rea & Co., Robt. J. Anderson & Co., Wm. Clark & Co., McIntosh, Hemphill & Co., Zug & Co., besides numerous others. His shop is the best regulated one in the city, perfectly equipped and systemized, and filled with none but the best of mechanics. Thus represented and located he is perfectly prepared to give estimates and perform all jobs on contracts in the best manner, either by day or contract, making a specialty of mill and foundry work, also giving special attention to erecting steam and hand cranes of all sizes, in which, as with other work executed by him, he has established a reputation equal to the best of his contemporaries, and well deserved.

L. FUNDIS & SON.—*Clothing & Furnishing Goods, 57 Frankstown Ave, East End.*

One of the leading houses of the East End is that of L. Fundis & Son, dealers in Ready Made Clothing, Hats, Caps and Gents' Furnishing Goods, situated at No. 57 Frankstown Avenue, in the fine brick block owned by the firm. The sales room now occupied by the house is 20x60, and is stocked with a full and complete assortment of articles pertaining to the lines enumerated. This house was founded in 1852 by Mr. L. Fundis with a capital of \$300, which has by careful management and shrewd business tact increased to not less than \$50,000, which is principally invested on Real Estate, clear of all encumbrance. The stock now carried by the firm is about \$6,000, and their annual sales reach \$12,000, which are principally to residents of the East End and surrounding districts. The members of the firm are Mr. Lewis Fundis, who was born in Baden, Jan. 14, 1832, and came to this city in 1848, and Mr. John Fundis, born at East Liberty, Dec. 14, 1858. They are wide awake, enterprising and energetic business men, as the brilliant success which has attended their business career will sufficiently indicate.

D. AYRES & CO.—*Live Stock, Central Stock Yards, East End.*

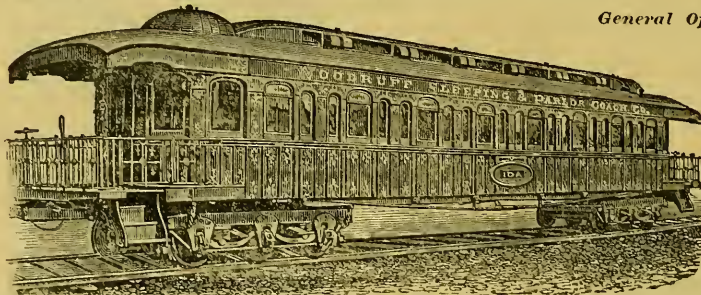
The present firm was established January 10, 1879, by Mr. D. Ayres, Jr., and Mr. H. A. Holdridge, as Commission Dealers in Live Stock. Mr. Ayres has for the past twelve years been identified with the business at the Central Stock Yards and connected with the firms of Hedges, Huff & Co., Cochran, Ayres & Co., and Hamilton, Lougry & Co. The office of this firm is at the Stock Yards, East End, and they do an exclusively Commission Business in Cattle, Hogs and Sheep. They employ two men at an average expense of \$125 per month. Mr. Ayres was born at Kalida, Putnam Co., O., in 1841, and came to Pittsburgh in 1867. Mr. Holdridge was born in Knox Co., O., in 1840, and came to this city in 1878. They are wide-awake and energetic young men and do a thriving business.

M. J. FARRELL,—*Plumbing, Gas & Steam Fitting, No. 236 Penn Ave.*

Though apparently diversified, the various branches of business in which Mr. Farrell is engaged form one complete whole and are interlinked. In addition to the occupation of Locksmith and Bell-hanger he is an experienced Plumber and Gas and Steamfitter, manufacturer of Stencilplates and Materials, Steel and Rubber Stamps. Repairer of every description of Small Machinery, Cutlery and Household Mechanism, and general dealer in Hardware, Locks, Keys, Cutlery, etc., at No. 236 Penn Avenue, between 7th and 8th Streets. Mr. Farrell is a native of Ireland, but has been a resident of the United States for many years and for over twenty years engaged in his present line of business in this city. His premises are 20x50 feet in size and he employs three experienced workmen with an excellent local trade.

WOODRUFF SLEEPING AND PARLOR COACH CO.,

General Office, No. 4 Market Street.



of all previous designs by the late Jonah Woodruff (the originator of the Sleeping and Parlor Coach idea), surpass all others in reduced vibration, improved ventilation, suppression of racket and friction, increased safety in the adjustment of the centre of gravity—nearer the floor—removal of berths from over the trucks, and other advantages, special among which is doing away with dead weight of at least six tons as compared with other sleeping cars, and being the only cars manufactured that are built with electric bell at each berth, which enables passengers to at once summon the porter to the respective berth calling, when anything is desired, being of special advantage to ladies with children, besides a general elegance and sumptuous convenience hitherto unapproached in any cars previously manufactured or designed. The business of the Company has already become extensive on many of the roads throughout the United States, where not less than eighty of these cars add greatly to the comfort and convenience of the general public, and are the first company to reduce their rates twenty-five per cent. from former prices, but enhance greatly the earnings of the respective roads upon which they are employed.

LAUGHLIN & DEAN,—*Ship Chandlers, Boat Stores, Groceries, &c., 90 Water St.*

In compiling a record of the business houses of the City and in making mention of the City's commerce and river traffic, we have a two-fold reason for noticing the house of Laughlin & Dean, first, as a new prominent business house on the river for their benefit, and secondly, for the benefit of the readers of this volume doing a navigation business, in directing their attention to the fine stock of supplies here to be found in the necessities appertenant to the shipping interests of our city, by way of ropes, cordage, oils, caking materials, provisions, groceries, &c. At the store of this firm, which occupies three floors of a building, 25x80 feet, may be found not only a full line of goods above mentioned, but also a complete stock of choice and staple groceries, fresh country produce and dairy products, as butter, cheese, eggs, fruits, vegetables and fowls, this being indeed headquarters on Water street for these every day necessities, whose real merit lies in their purity and freshness, which is always here guaranteed. In addition to these lines the firm make specialties of St. Louis flours, the leading of which is the celebrated "Chester" brand bought direct from the mills as per order of this house. B. M. Laughlin and John D. Dean, who compose the firm, are both well known to the trade, and we are safe in commending to our river readers the fulfillment of their every want at satisfactory prices.

JAMES PHELAN,—*Hosiery and Gents' Furnishing Goods, No, 32 Fifth Avenue.*

The "Old Stand Stocking Store" is one of the landmarks on Fifth avenue. It was started in 1839 by Michael Daly, uncle of the present proprietor. Mr. Phelan succeeded to the business in 1851, having been connected with the house as early as 1850. Three floors are here occupied by a stock of goods amounting in value to about \$20,000. The business embraces Hosiery and Furnishing Goods, and the sales require the attention of five persons in the store. Special attention is given to fine imported goods, and the best selections are made from English, French, German, Irish and Scotch manufactures, among which may be noted the Irish Balbriggan Goods and Scotch Underwear. The house has also a high reputation for its manufacture of well-fitting shirts of the best quality of material. For fine goods, large variety, choice selection of goods and reliability of guarantees, Mr. Phelan's house has a reputation of which any business man might be proud.

LOUIS A. DENISON.—*Grocer, Penn and Frankstown Avenues, East End.*

In a block of three-story buildings fronting on both Penn and Frankstown Avenues, East End, owned by the Denison brothers, is located the well arranged Grocery Store of Louis A. Denison. This house was established in 1833 by Mr. William L. Denison, father of the present proprietor, who came to Pittsburgh in 1832 from Connecticut. After his death, which occurred in 1873, the business was conducted under the firm name and style of W. L. Denison's Sons until Jan. 1, 1879, when Mr. Louis A. Denison became sole proprietor. The house is now one of the most popular in the East End, and the business will compare favorably with that of any similar establishment in the city proper. His store is 20x70, fronting on both the streets named, and four assistants are constantly employed. Mr. Denison was born in Pittsburgh in 1851, and may appropriately be classed among her most prosperous and enterprising young merchants.

A R. REINEMAN & BRO.—*Wholesale & Retail Florists, 25 Fifth Avenue.*

The delightful industry of the florist has increased with the growing wealth and luxury of this city to such an extent, as to form a very important factor in the general prosperity and resources. Among those houses that have secured by their enterprise and energy more than usual prominence in this department, may be mentioned the Messrs. A. R. & E. C. Reineman, who, under the caption title, founded their business more than a year ago, with facilities that placed them at once in the front rank as commercial and botanical florists. The Garden Houses of the firm are located on Troy Hill, and consist of about 10 acres of garden thoroughly stocked with the choicest variety of trees, shrubs and plants to be found in this section of the country. The Green House, which is heated by steam and a 25 horse power engine, covers an area alone of about an acre and contains a selection of rare indigenous and tropical flowers and flowering plants. From this source the store at No. 25 Fifth avenue is supplied with daily floral additions to its stock, and charming decorations furnished for every social or funeral occasion. Orders from abroad are promptly filled, for Flowers cut or otherwise, Plants, Bulbs, Fancy Stands, Baskets and Vines of every description. With these facilities and all the added advantages to be derived from an enlarged experience and thorough familiarity with the work, the Messrs. Reineman are to no small degree deserving of the hearty support and consideration of the community.

I. JACKSON,—"Star Clothier," 322 Liberty Street.

One of the most complete and extensive stocks of Ready Made Clothing and Gentlemen's Furnishing Goods to be found in Pittsburgh, may be seen at the well known "STAR" Clothing Emporium of Mr. I. Jackson, which is located at No. 322 Liberty street, corner of Oak alley. The store room is 15x60 feet and is filled with a line of the most desirable and fashionable goods in the market, estimated at not less than \$10,000 in value. He has a large city trade as well as an extensive and lucrative custom along the line of the Pennsylvania Railroad, amounting to \$10,000 or \$12,000 annually. In addition to the Clothing and Furnishing Goods business, Mr. Jackson makes a specialty of manufacturing fine suits to order, having a merchant tailoring department in connection with his establishment, in which he employs a number of first class workmen. Mr. Jackson was born in Germany in 1844. He came to the United States in 1860 and to Pittsburgh in 1874, when the present business was established by him.

W. A. BUNTING,—*Stencil Works, 25 & 27 Fifth Avenue.*

Mr. Bunting started his business in 1869 at No. 11 Market street, afterwards removed to 184 Liberty street, and became located as above in April 1878. His business embraces the cutting of Stencils, Steel Stamps and Burning Brands, the manufacture of Seal Presses, Rubber Stamps, Ribbon Stamps, Dies, Seals, &c., also Electrotyping and Stereotyping. The office and exhibition rooms are on the 2nd floor, the manufacturing department on the 4th. Eight men are employed in cutting, manufacturing, &c., one on steel stamps and burning brands, two on seal presses, one on rubber stamps, one on ribbon stamps, one printer, one clerk and one office boy. New designs in letters and dies are constantly being produced. A new article is metal-bodied rubber type for hand presses, superior to any other. This house is the leading one in its line in the city, and equal to New York houses in variety and scope of work and in the execution of the same. Its trade extends from Harrisburgh, Pa., to Indiana and further West, through which district he has numerous agents, and solicits correspondence from those who wish a pleasant and paying business. The proprietor is the inventor of the "Eureka Cigar Box Brand," the most convenient and rapid stamp in the world, and makes a specialty of its manufacture. He was born in Maryland in 1846, and has been a resident of Pittsburgh since 1869.

KEYSTONE PAPER CO.—Nos. 126 & 128 Second Avenue.*New York, 22 Vesey Street.*

This company was established in 1878 by Capt. C. C. Markle and J. K. Cass, for the purpose of handling the products of the West Newton, Mill Grove and Roaring Spring Paper Mills, Capt. Markle being a member of the well known house of C. P. Markle & Sons, proprietors of the two first named plants, and Mr. Cass of the firm of Morrison, Bare & Cass, owners of the Roaring Spring Mills. Engrossing the total product of these extensive concerns, the Keystone Paper Co. finds a market for 600,000 pounds of paper per month, involving annual transactions of over one million dollars, at the present unprecedented prices, and ranging over the entire United States; a considerable export trade being done with Cuba and other foreign points. The larger part of the business of the house lies in the line of News Printing and Book Paper, but includes Hardware, Manillas, Express, Tea, Glass, Rag and Straw Wrapping, Roofing Felt, Lining Felt, and Printed Wrappings, etc., affording buyers all the range and facilities that can be offered by any contemporaneous concern in the country. Some idea of the capacity of the house may be gained from the fact that the West Newton Mills alone cover an area of over two acres, and employ 100 skilled operatives, to pay whom an annual outlay is necessary of between \$60,000 and \$75,000. Of the four mills under control of the company each manufactures four different kinds of paper, the machinery in all of them being the best that modern ingenuity can devise, or capital and enterprise supply.

Capt. Markle is the resident partner and is personally alert in every department of the business, supervising the operations of the mills at West Newton, and conducting the financial and various other transactions at the office and ware rooms in Second Avenue. A native of Westmoreland Co., Pa., the Captain was born in 1840; he served through the late War of the Rebellion with honorable distinction, and removing to Pittsburgh in 1867 has since that time been largely identified with the industrial interests of the community, not only in the line of his present vocation, but extensively connected with the manufacture of coke along the line of the B. & O. R.R. The successful operation of numerous diverse enterprises has made Capt. Markle widely known in this city and surroundings, where his extraordinary business capacities have been universally recognized and appreciated as being of the highest order. His partner in the Keystone Co., Mr. J. K. Cass, was born at Coshocton, O., 1844, and is a nephew of Gen. Geo. W. Cass. He removed to this city in 1877, and shortly thereafter to New York, where he conducts the extensive Eastern business of the company at No. 22 Vesey Street. As a firm with whom to establish permanent relations, the Keystone Paper Co. is perhaps one of the most desirable in the country. Liberal, decisive and honorable, with a product unsurpassed for excellence in any market, and facilities that defeat all competition, the house is thoroughly commended to the public as entirely meriting the high consideration of which it is the object.

**H. W. LAGEMAN & BRO.—Groceries, Tea, Flour, &c.,
Corner Frankstown Avenue and Station Street, East End.**

This firm succeeded Adam Mohler in his business, in March, 1877, and have since increased their trade, until it now ranks with the most prominent of the East End grocery houses. Their stock, usually to the value of about \$3,500, is composed of the choicest articles to be obtained, and their business, which is about \$25,000 yearly, requires the attention of three men (two salesmen and a delivery-man) besides the proprietors, the pay roll being \$100 monthly. Their capital, which was originally \$2,000, has largely increased, while their uniform system of fair dealing and courteous endeavors to please, have extended their trade throughout East Liberty and the surrounding villages of Homewood, Dallas and Wilkinsburg. Their store, a three-story brick building, 20x70 feet, is situated in one of the most prominent locations in the East End, and this, added to the facts before mentioned, has secured them a large and respectable class of trade. Both members of the firm are natives of this city; Herman W. Lageman having been born December 13, 1854, and H. J. Lageman, August 5, 1849. They have resided here all their lives, and are therefore too well known to require a more extended notice.

**PENNSYLVANIA LEAD CO.—Smelters and Refiners, Office, 44 Wood St.
Works, Mansfield, Pa.**

Adding in no small degree to the general industrial thrift of this community, the Pennsylvania Lead Company naturally demands the attention of a work, the objective point of whose aim is a proper and detailed display of the resources and advantages of Pittsburgh. Organized in 1872, under the mining and manufacturing laws of Pennsylvania, as the Pittsburgh Smelting and Refining Company, the title was changed the following year to the present style, as being more appropriate and descriptive. A close corporation, its operations in the smelting and refining of lead for the use of corrodors and others, have been awarded the most signal success, the business having constantly augmented from the inception of the enterprise to the present time, and still rapidly increasing. The plant of the company is located at Mansfield, a short distance west of the city, upon the line of the P. C. & St. L. R.R., and some idea of the magnitude of the works may be gained from the fact that sixty men are constantly employed, and that last year 12,500 tons of lead were brought to a state of chemical purity and freedom from every trace of foreign matter or alloy that would affect or impair the product of the corrodor. The principal markets for these goods are found in Pittsburgh, Chicago, New York, Philadelphia, and other large cities of the East and West. The officers of the company are Mr. J. E. Schwartz, President, J. B. Arnold, Esq., Secretary, both men well known to the community and long identified with the manufacturing interests of this city, and as there are few institutions that have achieved so great a degree of prosperity in so limited a period, so there are perhaps still fewer that occupy in every respect a higher position, or one subjected to less cavil.

H. KLEBER & BRO.—Pianos and Organs, No. 122 Wood St.

For the past quarter of a century the firm of H. Kleber & Bro. has been known in Pittsburgh, as dealers in musical merchandise. It is the oldest house engaged in that line of business, under the original firm name and style, now in the Smoky City. It was established in 1848 by Henry Kleber, who two years after took his brother Augustus into partnership. These are gentlemen of unquestioned business integrity, whose long experience in the business gives them advantages which are enjoyed by few. They occupy the spacious five story building No. 122 Wood St., 20x80 feet, and are sole agents in Pittsburgh for the celebrated Steinway and Chickering Pianos, which agency they have held since 1857. They have also been the exclusive agents for the world renowned Burdett Organs for the past twenty years, during which time their sales have far exceeded those of any other instruments of that description. They have at present on exhibition about eighty pianos and some sixty organs of various styles, and they also carry one hundred and fifty pianos for rent. The amount of stock generally kept on hand is valued at about \$80,000. In addition to the large number of pianos and organs to be found at this establishment, they keep every description of musical instruments known to the trade, and the largest line of general musical merchandise to be found West of New York City. Their trade is distributed through Western Pennsylvania, Eastern Ohio and West Virginia, and the amount of their annual sales exceeds \$150,000. Mr. H. Kleber and Mr. Augustus Kleber, the two gentlemen composing the firm, were both born in Germany, but came to this country when very young, and have been residents of the United States since 1832.

JAMES REES, —Machinery, Duquesne Way and 4th St.

Among those enterprises that have made Pittsburgh celebrated for its splendid mechanical success, that of Mr. James Rees is perhaps entitled to particular mention in a work designed to exhibit in detail the varied resources and capabilities of this city. For more than a quarter of a century this house has engaged in the manufacture of every grade and class of machinery, including Marine and Land Engines, Saw and Sugar Mills, Steam Boilers, Oil Tanks, Salt Pans, &c. Blast Furnace machinery, Iron and Brass Castings, and Pipes, Steam Pumps, &c., all of which from the perfection of construction and mechanical excellence have established a reputation that is not confined to the United States. As a builder of Steam Boats, in Wood, Steel, or Iron worker, he has perhaps performed his greatest feats as a mechanic, and achieved the most signal success. The first steel steam boat ever constructed in the United States was built last year by this house, under the direction of Jas. Rees' son, Thos. M., who went to South America and superintended its construction, and after its completion made a successful trial trip on the Magdalena River, for trade on the Magdalena River in South America, and it has been a matter of comment and congratulation by the press of the country that this first effort, opening up so wide a field for industry and capital, was attended by the most satisfactory results, meeting more than all the requirements demanded, and accomplishing with ease a speed of ten miles an hour against a five mile current. The plant of Mr. Rees is located on the Allegheny River, at the foot of 4th St., and is about as completely equipped as modern improvement and inventive talent can suggest. The buildings cover an area of over half an acre and afford ample conveniences for the business. A large force of mechanics are employed here, requiring a large weekly outlay. The annual trade of the concern is very large, and extends through the United States and to other countries. Mr. James Rees, the founder of the establishment in 1854, and still at its head, is originally from Wales. He came to this country when but a youth, and by the exercise of sterling virtues and great constructive ingenuity, has become a representative, and a self made man of the truest type. As the inventor of a Patent Steam Boat Hull, and the best adjustator cut-off for Steam Engines in use, Mr. Rees is widely known on all the rivers of the West, the latter invention being applied to nearly all the steamboats navigating the Ohio River. The commencement of his career was attended with great difficulties, small returns, and no capital. Its outcome reflects credit upon the Iron City, and entitles him to the high estimation of all honest promoters of Industry.

A. G. HATRY, —Iron Commission.—COYNE & HATRY, —Machine Builders.

Office: 114 & 115 Water St.—Works: Cor. 28th and Smallman St., Pittsburgh.

Among those extensively engaged in the sale of Iron, Nails, Steel, Borax, and particularly Rail Road supplies in manufactured metal, Mr. A. G. Hatry occupies a prominent place, especially in the last named department of his business, from the fact of having no competitors in this city. Besides conducting a commission trade in these products Mr. Hatry carries a very considerable stock, requiring a capital of over \$20,000, enabling him to transact with greater facility a business that extends over the entire United States, and averages between \$500,000 and \$1,000,000 annually. These figures seem to establish the fact pretty conclusively that Mr. Hatry either has it in his power to offer the trade unusual advantages, or that his ability for the business is of no common order, the real source of such prosperity being probably found in a happy conjunction of both facilities and abilities. The extent to which the transactions of the house are carried, will appear more striking when it is known that the business was only established in 1874, though Mr. Hatry had been a resident of this city for nine years prior to that date, and previously a citizen of Ohio, from which State he entered the Union Army during the late rebellion, and served with distinction for four years, obtaining the rank of Colonel nearly two years before the close of the war.—In 1875 he associated himself with Mr. John Coyne, under the style of COYNE & HATRY, for the purpose of manufacturing, as sole patentees and inventors, the Patent Automatic Nail Selectors, and Improved Cut Nail Machines, the former being one of the most useful devices for the rapid automatic rejection of inferior nails ever conceived, and proves an invaluable apparatus in every nail factory where introduced. The plant of the firm is situated at the corner of 28th and Smallman Sts., and is amply equipped for the manufacture of these specialties, in which a business is transacted annually of about \$100,000.—Mr. Coyne is a native of England, and has resided in Pittsburgh about 10 years. His personal attention and superintendence is given to the constructive departments of the work, and as an accomplished mechanic he has few equals. In every respect the house is a reliable one and highly conducive in its operations to the industrial prosperity and advancement of the city.

JAMES A. McNALLY, —Importer and Jobber of Woolens, No. 60 Wood St.

As one of the only two houses engaged exclusively as jobbers of piece goods in this city, the trade and establishment of Mr. James A. McNally are worthy of more than passing mention in this work. Not alone from the extent and magnitude of his transactions, but the extraordinary ability that has been displayed in securing, from so comparatively small an origin, so signal a success. A native of the County Down, Ireland, Mr. McNally came to this city in 1856, and ten years later established his present business, which from its inception to the present time has been constantly enlarging the trade now extending over a large portion of the middle, Western and Pacific States, a very considerable traffic being done in California, in all amounting to over a quarter of a million annually. The premises of the house are located as above, and consist of one large double brick building, three stories high, 25x90 feet, on the corner of Wood St. and 4th Avenue, stocked with foreign and domestic woolens to the value of from \$65,000 to \$70,000, carefully selected and adapted expressly for merchant tailors, with whom the trade of the concern is carried on, to transact which 8 assistants are required. Importing direct from European markets, Mr. McNally has established relations that enable him to compete, in the advantages offered the trade, with any firm in the country, while his dealings with the producers of domestic fabrics are equally satisfactory. Energetic, talented, and reliable, Mr. McNally has made a very conspicuous mark upon the commerce and trade of his adopted city, with whose interests he has been closely involved for nearly a quarter of a century, and whose prosperity he has materially promoted.

SAMUEL R. LIMEGROVER, —Baker and Confectioner,

Penn Avenue, opposite Collins St., East End.

The "Excelsior Bakery" and Steam Ice Cream Works is located on Penn Avenue, opposite Collins Street, at the East End. It was originally established by Daniel E. Bown, who was succeeded by M. Samuel R. Limegrover in the early part of the present year. The various articles manufactured at this establishment are noted for their excellence, and the business is steadily increasing. In addition to the products of his Bakery Mr. Limegrover keeps a fine assortment of Choice Confectionery, Fruits, Jellies, Canned Goods, &c. One steam engine and boiler is used, and four hands are employed at the establishment. A specialty of Mr. Limegrover is in furnishing Wedding Parties, Society and Party Dinners and Suppers, and entertainments of any description. His facilities for this part of the business are unsurpassed, and his well known taste and skill in such matters enables him to give unbounded satisfaction. He carries a stock of about \$1000, and his annual business reaches between \$3000 and \$4000. Mr. Limegrover was born at Sharpsburg, Allegheny County, Jan. 1, 1855, and commenced business at his present location.

D. K. BOAS,—*Druggist & Chemist, Butler & 43rd Streets.*

At the corner of Butler and 43d Streets is one of the most elegantly fitted and handsomely arranged Drug Stores and Pharmacies in this city. The genial, popular and enterprising gentleman, Mr. Boas, will be found with the most complete, varied, handsome and elegant stock of Drugs, Chemicals, Perfumery, Toilet Articles, fine Instruments, etc., to be found anywhere in this city, everything being new, fresh and clean. The room is handsomely located on the corner, is 17 feet front and 40 feet deep, is filled with Marble Counters, Prescription Case of elegant designs, handsomely plated Show Cases and Fixtures of all kinds of most neat and tasteful patterns. Mr. Boas has been located at junction of Penn Ave. and Butler St. for 6 years, selling out there early in 1879, and opening his present, beautiful store, at an expense of about \$8,000.

Mr. Boas was born in York, Pa., in 1846, came to Pittsburgh in 1873. He served two terms of enlistment in the Union Army, first in the 130th Pennsylvania Volunteers, afterwards in the 195th, being but 15 years of age, when first enlisting. He participated in all the arduous services of his regiment, going through all their campaigns, marches and battles. He was the youngest man in his corps; after close of the war he graduated at Dickinson College, Carlisle, Pa. During his Senior year at that institution he was Assistant Instructor in the Laboratory to Dr. C. J. Henns, Professor of Chemistry and Natural Sciences. After graduating he went to No. C. and engaged in business and was burned out in 1872, then came to Pittsburgh and entered the Drug business in partnership with Mr. Cornman as Cornman and Boas, at Penn Ave. and Butler Street, sold out his interest to Cornman in 1874 and went into the establishment of McClarran and McKennan, where he remained but a short time, having to return to the old place. Mr. Cornman not being able to fulfill his contracts, being involved, and resume the business which he assumed with liabilities, shortly extinguishing the debt and placing the business in prosperous condition. He remained at the business until recently, when he sold out to Mr. Tea. Mr. Boas has taken considerable interest in political matters, and wields a large influence in the community where he is known.

A. BRICKER & SONS,—*Commission Merchants, No. 199 Liberty St.*

One of the most favorably known and prominent Commission Houses on this busy thoroughfare is that of A. Bricker and Sons, which was founded in a small way in 1865. Their business however has steadily increased since that date, until it reaches the handsome amount of \$100,000 per annum, and is regularly improving each succeeding year. They occupy the entire building, three stories and basement, 22x110 feet at No. 199 Liberty St., and transact a general Commission business in Flour, Grain, Fruit, Butter, Cheese, Lard and every description of country produce, employing four assistants. Mr. A. Bricker, father of the present proprietors and one of the founders of the house (now deceased), was a gentleman of more than ordinary business sagacity and foresight, and his sons, David and Levi Bricker, who now carry on the business, are worthy representatives of their respected sire. As originally established, the business of this house was confined to Flour, Feed and Grain, but shortly before the death of Mr. Bricker, Senior, it was changed to its present line with gratifying results. By judicious management, strict attention to business and undoubted business integrity the young men of the firm have succeeded in making a large increase annually to their trade, and the house to-day ranks as one of the first in that line of business in the Iron City.

LUEBBE & BRO.—*Wholesale and Retail Grocers, Nos. 23 & 24 Diamond*

This extensive establishment was founded many years ago by J. D. Draro, Esq. The firm afterwards became Haslage and Co., who were in turn succeeded by the present proprietors, Messrs. William and Henry Luebbe, both natives of Germany, but for many years residents of Pittsburgh and connected with the firm of Haslage and Co. since 1857. They occupy a large double warehouse, 40x115 feet, at the number above given, which is filled from basement to attic with a large and complete stock of every description of goods pertaining to the Grocery trade, and a choice assortment of pure Wines and Liquors, employing eleven clerks and salesmen. They do a large and flourishing business in the city and all the surrounding towns, comparing favorably with that of any other house in the same line of business in the city.

PITTSBURGH WIRE WORKS,—*James R. Taylor & Co., No. 35 Market St.*

The manufacture of Wire Work of every description, plain and ornamental Wrought Iron Railings for parks, lawns, verandas and cemetery lots is carried on very extensively by the firm of James R. Taylor and Co., at No. 35 Market St. This house was established in 1842 by James R. Taylor and Co. In 1874, Mr. C. Dean, after ten years faithful service in the establishment, was admitted as a partner. The increase in their business has been very large within the past few years. The main building occupied by them at the location named, is four stories high, 25x125, and they also occupy three floors of an adjoining building of the same dimensions. They employ about twenty hands with all the latest and most approved machinery for the speedy production of all work in their line, and carry a stock of about \$8,000, transacting an annual business of about \$35,000. This house has of late years been particularly noted for the elegant designs of Wrought Iron Fences manufactured by them, and they make a specialty of an improved Fly Screen for windows and doors, made to fit any desired size or shape. Mr. Taylor is a thorough master of this branch of industry and has resided in this city for many years. Mr. Dean was born in Pittsburgh in 1850. Both members of the firm are practical workmen and energetic and reliable business men.

W. W. WATTLES,—*Jeweler, No. 30 Fifth Avenue.*

The assertion may be safely made that no Retail Jewelry House in the city is regarded with more favor than that of Mr. W. W. Wattles. Established twenty years ago by the present proprietor, the business has gradually augmented from very limited proportions to an annual trade of \$50,000, and a stock unsurpassed for variety, richness, or tasteful selection. In these respects the house has acquired a reputation that is an assurance to its customers that they could not here buy an inferior article even if they would, no second qualities ever being tolerated in this establishment. For elegant assortments of fine Watches of the best makes, Kings, Jewelry, Jewels, and especially in Diamonds, the house of W. W. Wattles has a wide celebrity, while in the countless articles of taste and utility in Silver and Plated Ware, French Clocks, Bronzes, Ceramics, Bric a Brac, and some articles of vertu, Dinner and Tea Sets, Urns, Turcenes, Emergences, Lavatory, Cologne and Toilet Sets, Fruit Stands, Cake Baskets, Casters, Candlesticks and Candelabras, the house presents advantages to the buyer that can hardly be duplicated in the West.—As a native of Pennsylvania Mr. Wattles came to the Iron City 26 years ago, and from that period has been identified with his present occupation. It is but simple justice to say that he has always maintained a position, both as a private individual and a business man, that has won for him in no stinted measure the confidence and consideration of his fellow-citizens, who at various times have endowed him with posts of responsibilities and trusts, which have been discharged with scrupulous fidelity. At the present time Mr. Wattles is Treasurer of Thiel College, Greenville, Pa.

W. H. PORTER,—*Alderman and Deputy Mayor, Cor. Butler and 37th Streets.*

This popular gentleman and upright and honorable officer is located on Butler Street between 35th and 36th Sts. He was elected to the position of Alderman in 1872, in which capacity he has continuously served since that date with honor to himself and to the great satisfaction of the people of his and adjacent districts. He was appointed Deputy Mayor of 5th Police District, Feb. 1, 1878, at the time the present Mayor assumed the Chief Magistracy of the City, in which capacity he has rendered efficient services, and given the highest satisfaction. There is no more efficient officer, nor one who has won a greater degree of respect and confidence by his honorable, upright and gentlemanly course, than Alderman Porter. He takes an active interest in political matters, and exerts a large influence in the councils of his party, and by the high esteem, in which he is held, commands a very large influence in his, and adjacent districts. He was born near Fredericksburg, Va., in 1839, came to this city at the age of eighteen, and entered the furniture business in the 12th, and afterwards in the 15th Ward. During the War he enlisted in the 123rd Pennsylvania Volunteers, Col. Clark's Regiment. At the expiration of his term of service he entered the Naval Service of the Government and was stationed a long time at New Orleans. At the close of the War he returned and embarked in the furniture business, in which he continued until elected to his present office in 1872. He is an intelligent gentleman of high character, and possesses the respect and esteem of all who know him.

LONDON TEA HOUSE,—*Martin & Collins, No. 3604 Butler Street.*

The large and fine establishment of the very enterprising firm of Martin & Collins is located at 3604 Butler Street, where they have a very large room, 20x60 feet, well arranged for their business, completely stocked with as fine a stock of Groceries, Teas, Flour, Provisions, etc., to be found in any establishment in the East End; a fine and tasteful display of their varied stock is made showing the good taste of the proprietors. These young gentlemen opened their present establishment in 1878, and since then has begun a new era in the grocery business in this part of the city. They began with small capital, but since their start have manifested the highest business qualifications, greatest enterprise, and remarkable energy in pushing their business forward to the very prominent position they now occupy. They possess a thorough appreciation of the wants and demands of the public, which fact has enabled them to so adjust their prices and conduct their business as to draw in so short a time the exceedingly large patronage they now enjoy, and enables them to do the business, reaching to \$25,000 per annum, they are now doing. The rapid rise and success of this establishment is a remarkable one and speaks well for the enterprising gentlemen.

Both of the proprietors are natives of Pittsburgh, Mr. G. S. Martin having been born in 1853, and Mr. A. H. Collins in 1849. They brought with them a thorough, practical and experienced knowledge of their business, having heretofore been connected with the grocery trade. They do business strictly on the cash basis. These gentlemen are both quite young, but the energy and ability they have shown since starting are rapidly sending them to a leading position among the successful business men of the East End. They have won the esteem and respect of the community in which they have located, by their upright, honorable course and courteous manner.

HOSTETTER & SMITH,—*Stomach Bitters, Nos. 57 to 61 Water St.*

It is very safe to assert that no firm extant has done more than Messrs. Hostetter & Smith to advertise Pittsburgh, not only in America, but the most remote regions of the habitable globe, as well as promote to no small degree the wealth and industrial thrift of this community. With such a marked reputation, they are peculiarly fit objects for mention in a work devoted exclusively to a detailed disclosure of the resources of the Iron City. Established more than a quarter of a century ago, at its inception the enterprise involved but a very limited capital, and facilities (comparatively) of the most meagre kind. At that early period in its history, the firm occupied part of a building on Penn St., at a rental of \$175 per annum, the total staff of employees engaged in the manufacture of the celebrated Hostetter's Stomach Bitters would scarcely number half a dozen. The business, however, contained the elements of success, and under the consummate tact and resolution of its projectors annually increased, with rapidly augmentive revenues and proportionately enlarged facilities in every department. The extent to which the operations of this house have reached may be illustrated by the fact that in 1866 it became necessary to do all its own printing, no firm in Pittsburgh, or perhaps in the whole country, being capable of producing, either in kind or quantity, the work requisite in carrying on the trade of Hostetter & Smith. In the Printing and Binding departments, alone, are now employed eighty compositors, pressmen and others. The equipment in machinery consists in part of 10 large cylinder presses, and 8 smaller ones, all of which are kept running ten months during the year upon the publication of Hostetter's Illustrated United States Almanacs, which are printed in the English, German, Dutch, French, Spanish, Welsh, Norwegian, Swedish and Bohemian languages. This Almanac was first issued in 1862 and was published only in German and English, increasing its edition each year and reaching in the year 1867 one million copies, which were disseminated in these two languages. Still increasing its edition each year it reached, in 1876, 9,000,000 copies, which were produced that year in all the various languages above enumerated, the average issue per year at the present time being 10,500,000 copies, consuming annually 16,000 reams of white paper, and about 2000 reams for covers alone. When first established the manufacture of Bitters was entirely a manual operation. The enormous increase in production, however, made this process impracticable, and machinery and apparatus of the best construction, with a capacity for putting up 500 dozen bottles per day, is now employed in preparing and bottling the Bitters, which are made entirely from the choicest remedial roots, barks and herbs, the active essences and freshly expressed juices of which are preserved in chemically pure spirits, forming a compound of the most remarkable vital force and efficacy, peculiarly active in the rapid and in many cases almost miraculous relief afforded in all diseases arising from climatic causes or derangements of which an impaired stomach is the prime occasion. In this department of the work 14 ponderous tanks are used, 15 feet in diameter and 5 feet high, and 10 tanks 8 feet high and 6 feet in diameter, and here are employed, in manufacturing, packing and shipping, not less than 50 hands. The buildings now occupied and owned by the firm are at Nos. 57, 58, 59, 60 and 61 Water St. They cover an area of over half an acre, are four stories in height, and are admirably situated for purposes of shipment by rail or river, through which mediums large quantities are shipped to all parts of the United States and territories, to South America, Australia and other foreign countries. Nine accountants, correspondents, &c., are engaged in the counting rooms of the firm, and it is not an over-estimate to say that in its direct and contingent operations, such as the gathering and growing of the necessary medicinal drugs, the manufacture of the paper with its dependent industries, the product of grain and its conversion to spirit, &c., &c., the house employs directly and indirectly the labor of 1000 people daily, and so far, aside from the intrinsic merits of its specialty, becomes a great factor in promoting the general good.

The senior partner, Dr. David Hostetter, is a native of Lancaster Co., Pa., where he was born Jan. 23, 1819; removing to this city in 1853, his whole history since has been attended with the most brilliant and successful business achievements. Not confining his talents to limits of that vocation that has made his name so celebrated, he has taken an interest in the development of the various resources of Pittsburgh, and conjoining the advantages of the community with his own, has pursued both with resistless activity, the broadest comprehension, and the most effective results. Geo. W. Smith, Esq., the junior partner, is also a native of Lancaster Co., Pa., and was born in the city of that name Feb. 22, 1823. He, too, is largely engaged in other enterprises, and may be regarded, in the fullest sense, as a self-made man, liberal, intelligent and sincere. As a firm perhaps no house in Pittsburgh is entitled to a higher place; none, certainly, is accorded a more universal or unfeigned consideration.

THOMAS ROSE & SON,—Boots and Shoes, No.19 Diamond Street.

One of the oldest and best known Retail and Custom Manufacturing Boot and Shoe Stores in the city was established by Mr. Thomas Rose in 1839, and for nearly half a century has been an important factor in supplying the wants of the Pittsburgh public in this essential line of trade. The premises occupied are centrally located and commodious, the upper floor being devoted to the making of Custom Boots and Shoes and repairing, where five mechanics are employed. The first floor comprises the salesroom for machine and hand-made work, in which a stock of about \$10,000 is generally carried, consisting of a full and well assorted line of Children's, Misses', Ladies' Shoes and Gaiters, and Boys', Youths', and Men's Boots and Shoes, bought directly from Eastern manufacturers, which enables the house to compete in prices and styles with any contemporaries, to the decided advantage of the customer. As a firm, this house is so well established for their strict adherence to truthful representation and reliability in business honor, that any comment from us would be unnecessary to further their well deserved popularity. The senior member, a resident of this city for forty-five years, has built for himself a high reputation, while the junior member, Mr. A. N. Rose, is acknowledged as one of our most thoroughly upright young business men.

M. F. CASSIDY,—Alderman, 94 Third Avenue.

The subject of this sketch, M. F. Cassidy, Esq., was born in this city, September 26, 1839, and before entering, as the people's choice, upon the duties of the office of which he is now the incumbent, was engaged in mercantile pursuits, having in early life been for several years in the merchant tailoring business, as partner in the firm of Kane & Duffy of Sixth Street, later was of the firm of M. F. Cassidy & Co., Produce Commission Merchants, and was called in 1872 to fill the Aldermanic chair of the 1st Ward. Filling the office so ably and so satisfactorily to his constituents, it was their pleasure to continue him in the same position of trust in 1875, when he was re-elected for another term. Not only as a careful advocate of the city's interest in the Council Chamber does he acquit himself most deservedly of the people's support, but in all matters pertaining to his private office business, he has ever proved an upright magistrate, a careful business agent and a worthy incumbent.

H. CHILDS & CO.—Wholesale Boots & Shoes, 133 Wood Street.

The first Boot and Shoe House established West of the Allegheny Mountains was that of John Albree, at Pittsburgh, in the year 1817. The business subsequently passed into the hands of Albree & Childs, who were in turn succeeded by H. Childs and Co., under which style the business has now been conducted for over forty years. Mr. Harvey Childs, Jr., and Mr. Ross Johnston, the members of the present firm, are both natives of Pittsburgh, and they have always been identified with the shoe trade of this section of the country. They occupy the entire five stories and basement of the elegant and commodious building, No. 133 Wood Street, and carry a stock of from \$40,000 to \$75,000, comprising as full and complete an assortment as can be found in any similar establishment in the Union. They employ four traveling salesmen with an extensive business acquaintance and flourishing trade in Western Pennsylvania, Eastern Ohio, West Virginia, Kentucky and Maryland. Few mercantile houses in the United States can boast of such a long continued, honorable and successful business career as that of H. Childs & Co., and it is but seldom that any one firm continues so long engaged, unchanged, in the same line of business.

KENNEDY F. LANGE, Eagle Pharmacy, Cor. Butler & 37th St.

At the corner of Butler and 37th Streets, the handsome and attractive Eagle Pharmacy is located, and is stocked with the finest and most complete stock of Drugs, Chemicals, Fine Instruments, Toilet and Fancy Articles, in endless variety, and the finest quality to be found in the city, and which are arranged and displayed in an extraordinarily attractive manner. Mr. Lange carries a stock of goods to the amount of \$8,000, and is doing a business of \$12,000 or upwards per annum. This is one of the most noted establishments in this part of the city, and enjoys a reputation of which Mr. L. has a right to be proud. Mr. L., the genial proprietor, is a highly accomplished and popular gentleman, possessing the confidence of the business community and enjoying the respect and generous patronage of an appreciative public. The business, which was started by Mr. L. in 1867 with a small capital, has grown into its present handsome proportions through the untiring energy and enterprise of its proprietor. Mr. L. occupies a very handsomely located and beautiful store room and three-story building on the corner, and the handsome and beautiful display of his goods embellished with an attractive show of beautiful and rare plants during the Summer season, is the subject of general remark and commendation. Mr. L. also possesses the esteem and confidence of the medical fraternity in an eminent degree. He was born in the city of Pittsburgh in 1845, is a son of Dr. Lange, a well known and highly respected citizen and accomplished physician. He has lived in this city ever since, and since reaching the age of maturity has been identified with the local politics of the city. He is now, and has been for some years, a member of the Central Board of Education, a position that he fills with honor to himself and the satisfaction of the community. He is a leading and popular Republican, and wields an important influence in the councils of his party and in the community with the interests of which he is so closely identified.

THE ENTERPRISE EXCHANGE,—Chas. Hilger, Proprietor. Cor. Penn Avenue & Butler Street.

The most popular, respectable and high-toned resort in the East End is the Enterprise Exchange, which under the liberal, careful and upright management of the very genial, courteous and popular gentleman Mr. Chas. Hilger the proprietor, enjoys a high degree of popularity and is patronized by the most prominent and enterprising citizens of Lawrenceville, and is the favorite resort of the leading citizens. Mr. H. has won for establishment so high a reputation by keeping a house of the highest character, and in the most respectable order, nothing but the most gentlemanly behavior is for a moment tolerated, such resorts and such men are an honor to the community in which they are found. Mr. Hilger is also proprietor of another fine establishment farther out of the city, which is also a favorite resort during the summer season.

Mr. H. was born in Baden, Germany, in the year 1842, he came to the U. S. when a child and located in Louisville, Ky., since a number of years. During the war he left there and went to Chicago, where he remained but a short time, re-mov-ing from there to Pittsburgh. He enlisted in the Union Army, serving 9 months until the close of the war, was discharged at Richmond, Va., returning again to this city, where for a time he was engaged as Commercial Salesman. Entering his present business in 1867 in connection with J. B. Pierson, the latter retiring from the Co. partnership at the end of the first year, since which Mr. H. has conducted the business himself in such manner, as to win the esteem, confidence and respect of the entire community. He is a young gentleman of intelligence and enterprise, takes great interest in the political affairs in his ward, exerts a large and important influence, he has been a member of the School Board for 6 years and is now a member of Select Council of the city, in which position he will be found exerting his influence in the interests of true reform. Mr. Hilger's popularity has been won by his manly and honorable course, during the ten years or more of business connection with the people of this section.

JAMES T. KINCAID, Jr.—No. 107 First Ave.

This manufactory of Steamboat and Hotel Cooking Stoves, Tin Ware, &c., is equal to the best, and occupies two floors, the upper one being used as a manufactory. Five hands are in constant employment, manufacturing Tin, Copper and Sheet Iron Wares. The greatest variety and choicest workmanship is done here of any place in the city, consuming over \$12,000 worth of stock per annum. The firm was organized in 1815 by Lewis Peterson, with whom Jas. T. Kincaid, Sr., learned his trade, and afterward became partner and in 1840 proprietor. In 1866 the firm became "Jas. T. Kincaid & Sons," and passed into the hands of the present owner in 1874. The Steamboat and Hotel Cooking Stoves of this firm are original with the former firm of Peterson & Co. They are made of wrought iron, and are known and acknowledged to be the best in use. All the steamboats on the rivers use them in preference to any other. Mr. James T. Kincaid is a native of Pittsburgh, born in 1828. He learned the business, which he has always followed, with his father, who was long known and respected in this city.

LEE & MARSHALL,—Wool Dealers, 90 Water Street.

This is a business which is but little understood by the masses, and its magnitude is but inadequately appreciated by the general public. The capital invested in this line of trade is very large and the business is one of the important features of our national prosperity. The home supply of wool is not equal to the demand and consumption, and large quantities are imported from foreign countries. The house of Lee and Marshall is composed of Mr. Hugh Lee and Mr. James L. Marshall. They have been engaged in business on Liberty Street for the past thirty-five years, and for twenty-four years under the present firm name and style. They have agents in the various wool growing districts buying for them on commission, and they handle on an average about 250,000 pounds of wool per year. Their sales are almost exclusively to eastern manufacturers and dealers for whom they principally purchase and ship, although frequently buying on their own account and holding it for an advance in price.

FREEHOLD BANK.—Discount and Deposit, No. 68 Smithfield Street.

Contingent upon and identified with the industries of Pittsburgh, the Freehold Bank is justly regarded as one of the most solid, conservative and responsible financial institutions in the city. Organized under the State laws in 1870, with a capital of \$200,000, the bank became a success from its very inception, under the management and direction of the following well known gentlemen: E. House, Esq., President, J. P. Speer, Cashier, L. H. Widney, Teller, the Board of Directors being Messrs. E. House, John Paul, John MacKin, T. W. Davis, C. L. Magee, Jared M. Brush, and T. S. Biglow.

The building owned and occupied on the first floor by the bank is a handsome stone front edifice, 40x60 feet, and three stories high, centrally located, and regarded as being a very valuable property. Taken altogether, no similar institution possesses a higher rank either on the score of solvency or able management, and the Freehold Bank may justly be regarded as one of the representative financial establishments of the Iron City.

J. P. WILLISON,—Undertaker and Embalmer, No. 4015 Butler St.

This very polite, courteous and popular gentleman, and accomplished Undertaker and Embalmer is to be found at 4015 Butler St., where he opened his establishment, and offered his valued services to the public in that part of the city in 1877, since which time his genial manners, high accomplishments, and prompt and careful attention to all business entrusted to his hands and the wants of the public, he has rapidly grown in favor, enlarged his business, and widened his already large circle of acquaintances and patrons. His energy and determination will achieve success in whatever enterprises he may engage. He was born in Allegheny County in 1842, worked on the farm of his father until 18 years of age, then learned the blacksmith trade. He enlisted at the beginning of the war in the famous 62nd Pa. Vol., Col. Sam Block, and served during the entire war, being wounded six times, but escaping without being seriously maimed or crippled, although bearing the scars of the "lead hail." During his term of enlistment he prudently saved his money paid him by the Government, with which, after the close of the war, he was enabled to gratify a noble and lofty ambition to educate himself. He applied himself to study closely for a considerable period. In 1866, through the efforts of an influential friend he secured the appointment of clerk in the House of Representatives at Harrisburg, which position he held with credit to himself, and the satisfaction of his friends for two years. After that he entered the Dry House of J. J. Bender & Co. as Book-keeper, leaving there to accept the position of Cashier in the Office of the P. C. & St. L. E. R., in which position he served seven years, after which he embarked in his present enterprise, in which he is meeting with encouraging success. Mr. Willison is well and popularly known in his community, actively participates in the public and political matters of his ward, and exerts an important influence in matters of that kind.

JOS. VOGEL,—Dry Goods, Notions, Carpets, Oil Cloths, &c., No. 3702 Butler St.

The large, handsome and splendidly stocked establishment of Mr. Vogel is located at No. 3702 Butler St., and is recognized as one of the most prominent Dry Goods houses in the East End. The room owned and occupied by Mr. V., is 20 feet front and 75 feet deep, the building being a fine 3-story brick. The store is filled from end to end with as large, varied and attractive line of goods as any one could desire, and the stock is kept supplied with frequent invoices of all the latest novelties and newest patterns. The beautiful manner in which the goods are displayed, the perfect neatness in which everything in the establishment is kept, everything in perfect order. Not a speck of dust allowed to accumulate anywhere, as is too frequently the case in many establishments, speaks volumes for the good taste, and the high appreciation of the advantages to be derived from an attractive and pleasant place in which to greet customers of Mr. Jos. Vogel, Jr. The popular, very polite and courteous son of the proprietor, who takes much pride in this as well as all other features of the business, and who by his very gentlemanly and courteous treatment towards all the patrons of the establishment, as well as by his popularity and general high character in the community adds much to the high esteem in which the establishment is held. The establishment is doing a large and growing business, reaching very large figures annually. Vogel's is known by everybody in this part of the city and favorably mention the establishment on all hands. Mr. Jos. Vogel first began business in this city 25 years ago as a Merchant Tailor on Liberty St. with limited capital, but by close attention to business, and enterprising ability rapidly accumulated capital, he continued in that business until 9 years ago when he removed to Lawrenceville and engaged in the Dry Goods business. Mr. Vogel was born in Germany and came to the U. S. in 1837, first locating in Buffalo, N. Y., afterwards removing to this city, he has accumulated considerable means during his long and busy career in this city, and is an honored and highly respected citizen, and an upright honorable Gentleman. The two sons of Mr. Vogel, John and Joseph, give their close attention to the business; they are both young men of popular and agreeable manners, with whom it is a pleasure to deal, and who are highly respected by the community in which they reside.

W. L. GRIFFITH & CO.—Millinery and Trimmings, No. 76 Market St.

W. L. Griffith & Co., whose place of business is as above, have a just reason to feel proud of the success which they have achieved in establishing themselves in such a prominent position in connection with the millinery trade of our city. They are dealers in all lines of Ladies' and Gents' Furnishing Goods, Millinery, Trimmings, Ribbons, Feathers, &c., &c., and occupy two light and spacious floors, as sales and manufacturing departments, in which ten salesmen and numerous trimmers, &c., are employed, while the members of the firm, Messrs. W. L. and S. L. Griffith, pay personal supervision to the business. Over the millinery department, as superintendent, Mrs. S. L. Griffith, a lady who possesses a thorough knowledge of the business, is daily in attendance. This house carry a large and diversified stock of \$10,000 in value, where every want, in this line of goods, may be as fully and economically fulfilled as at any place in the city. In addition to the attractions usual to such a house, here may be found, also, headquarters for the celebrated Demorest's Patterns, the most reliable in the country. This firm, although established as late as 1875, has achieved a recognized success and reputation, both in business relations and in social connections, which may well be worthy of the sustenance and patronage of both our own residents, and those visiting our city from neighboring cities and towns, will always find it to their advantage in visiting the house of W. L. Griffith & Co., at No. 76 Market St.

EPHRAIM CLAY,—Hosiery, Gloves, Notions, &c., No. 37 Diamond St.

This well established and successful jobbing and retail house is of eighteen years' standing, and carries a large variety of goods in the line of Hosiery, Notions, Gloves, Yarns, and Gentlemen's Furnishing Goods, the usual amount of stock being about \$15,000. There are four floors in the building, all of which are used in the business of the house. Five hands are usually engaged in the business, attending to the wants of the trade at the house, while one traveling salesman, in the person of Mr. Phil. Baer, represents the house through Western Pennsylvania, Ohio, and West Virginia. The well-earned reputation of the house has given it a large and steadily increasing trade, and its stock is as complete as any in the city. Mr. Clay was born in England in 1818, has been in this State for about 30 years, the last 18 of which have been spent in this city and in the business he has so successfully established.

JOSEPH MACLEAN,—Bookseller and Bookbinder, Room 3, No. 41 Fifth Ave.

As a dealer in Books, making a specialty of mechanical scientific and art works, and rare publications, it is safe to assert, that Mr. Joseph Maclean possesses a more detailed, as well as comprehensive knowledge of his business, than any competitor in this city, and can at the same time offer advantages to the regular or casual book buyer, that may not be duplicated in the West. For more than ten years Mr. Maclean was associated with the widely known publishing firm of Gebbie and Barrie, Philadelphia, and in conjunction with them established a Book House in Pittsburgh 1871, which however was subsequently removed to New York, of which place Mr. Maclean became a resident. Between the last named period, and 1878, however, he was a frequent visitor to this city, maintaining his relations with the trade here, and finally in that year engaged in business for himself, exclusively at the above location.

The premises occupied by Mr. Maclean are admirably suited for the book trade, and are stocked with a choice assortment of special works in the lines mentioned, as well as a large miscellaneous collection in the province of general first class literature, classical and modern, the stock being of an average value of about five thousand dollars. To this spot resort many of the prominent book lovers and buyers of this city. Finding invariably something curious, rare or new, upon the well filled shelves, to reward them for the quest, constant additions being made in all departments, through the foreign or eastern connections, established by the energetic proprietor. As sole agent for the Harper Brothers in this city, Mr. Maclean controls the sale of Stanley's celebrated work in Africa, "Through the Dark Continent" and deals largely in other subscription books, for reference generally, or in particular branches of mechanics, chemistry or the arts etc., etc. Indefatigable in the pursuit of his business, for which he possesses marked talent and appreciative comprehension, Mr. Maclean's relations are mainly with the highest and most intelligent classes of the community, to whom he can always offer advantages in the purchase of books, and the selection of libraries not to be equalled by any cotemporary, either here or in the eastern cities, and which have given him a position in the trade, rarely acquired except by years of exertion and experience. In the department of Binding, Mr. Maclean has effected special arrangements with the best binders in Philadelphia, by which the finest work is invariably insured, at the most moderate outlay. In every respect this establishment is a model one, the proprietor being thoroughly deserving of the patronage and consideration of the public, to whom his enterprise is cordially commended.

THOS. FAWCETT & SONS,—Bituminous Coal, Office, 87 Water St.

In the great coal interests of Western Pennsylvania, so closely identified with the industries and development of this community, a review of the trade in extent, and the mode of carrying it on in respect to transportation to other points must prove interesting to every reader of this volume, either in or out of this city. In compiling such a review perhaps no citizen of Pittsburgh is more fully posted, and more capable of giving to our readers an idea of the scope and extent of changes that have occurred in the last quarter of a century, than Thomas Fawcett, Sen., Esq., at whose office our reporter obtained the information for the formation of this brief notice, regarding the operations of this firm (composed of Thomas Fawcett, Sen., James T. Fawcett, and Thomas Fawcett, Jr.), which may be taken as an illustration of the advancement and improvement attained in this line of industry.

Succeeding his father, Mr. James Fawcett, who commenced the mining of coal, and wholesale dealing in the same as early in our city's history as 1831, and was accordingly one of our earliest miners and coal merchants, Mr. Thomas Fawcett, Sen., had, upon entering into business in 1850, at the age of 23 years, a knowledge and experience in the coal trade possessed by few young men of those days. At this date (1850), before the general use of steamboats and tugs, coal was floated down with the current of the river to cities south of us, requiring to every pair of boats, with a capacity of 40,000 bushels, 25 men to guide and handle them. Through the different gradations of changes from year to year, this firm have kept pace with, and made large original improvements, until now a single tow-boat will convey 20 coal boats and barges, having a capacity of 500,000 bushels, manned with but 30 men, showing an advancement in this branch of nearly 1000 per cent. over those of former days. Bringing these vast advantages in practical use, this firm now own and operate two large tow-boats, 50 barges, holding 12,000 bushels each, and 100 coal boats, holding 24,000 bushels each, which are called in requisition, in addition to one tug-boat for harbor use, in effecting for them an outlet for the immense amount of coal mined from their mines at Green Springs, opposite Braddock's Field, where they own over 100 acres of excellent coal land, from which are yearly extracted not less than 6,000,000 bushels of bituminous coal, which is, to a large extent, shipped down the Ohio and Mississippi Rivers as far South as New Orleans, at which point the house have a yard for the sale of their coal to the wholesale and retail trade of that city, in addition to which large numbers of cotton presses, steamships and steamboats are supplied, both along the rivers at different points, and at the intermediate cities lining the banks between Pittsburgh and New Orleans. To carry on the business of Fawcett & Sons 200 men are engaged in the different branches of mining, shipping and handling, to whom are monthly distributed about \$12,000 in payment for their labor. As a representative firm in the coal trade, that of Thomas Fawcett & Sons may unmistakably be styled the largest shippers down the river, and the oldest in the city, being the only firm engaged continuously since 1850, and justly deserving the large trade they have built up and so successfully hold. The senior member was born in this city in 1827, and in addition to the part he has taken in the promotion of our industries in the capacity in which he is most prominent, he has contributed largely in capital, time and influence to the upbuilding and upholding of our financial institutions.

GEO. M. IRWIN,—Grain and Provision Broker, No. 55 5th Ave.

Hardly to be classed under the Industries of Pittsburgh, and yet intimately connected with them, by association, the business of Mr. Geo. M. Irwin, as a Grain and Provision Broker, demands recognition in this work. A native of Beaver Co., Pa., Major Irwin has been a resident of this city for over 10 years, and since 1875 has devoted himself with great and deserved success to his present occupation. In constant connection, by wire, with the corn and grain exchanges of Chicago and the West, and with extraordinary advantages in the prominence and sagacity of his correspondents, no man is better able to form a judgment on the fluctuations of the market, or direct with greater success the operations of margin buyers. His tact and experience in this respect has been a matter of frequent comment by the press, as well as a source of handsome profit to his clients. The method of Maj. Irwin is such that buyers or sellers through him, for future acceptance or delivery, manipulate their own investments, the same being deposited in a National Bank for mutual protection, a small percentage only in each pool or transaction going to the broker. As a means of realizing rapid and considerable returns upon small ventures, the operations of Maj. Irwin show pretty conclusively that capital so employed is subject to no more risk than if vested in ordinary trade transactions or commercial or other products, while the profits are likely to be, from the system in use, measurably greater. As a judicious, cautious and adroit adviser, Mr. Irwin has repeatedly given evidence of marked capacity. Those at a distance who desire to avail themselves of the advantages he offers can do so by correspondence, as well as by personal interview.

UNION PLANING MILL COMPANY,—No. 50 18th St., South Side.

As no unimportant factor among the industries of Pittsburgh, in connection with the lumber trade, the above corporation is worthy of special mention in this work, both from the extent of its operations and high standing in other respects. Chartered in 1866, with a capital stock of \$20,000, the affairs of the company have been so ably and faithfully managed that each year has brought about an increasing business, enlarged resources, and a great range of usefulness. The officers at present are: James McMasters, President, Wm. Wigman, D. Shutte and S. Hamilton, Directors, and A. H. Hunter, Secretary and Book-keeper. The premises occupied by the establishment are situated as above, and consist of one large building, 40x120 feet, with extensive wings, containing the most improved and perfect machinery for the manufacture and construction of Sashes, Window Frames, Doors and Door Frames, Mouldings, Weather Boarding and Flooring, Boxes of all descriptions, &c., &c.. One large engine and steam boiler are required to drive the various mechanical appliances, and 35 to 40 employees are constantly engaged, occasioning a disbursement of from \$450 to \$600 per week. In the matter of the manufacture of boxes for glass and other wares, this concern does a larger business than any of its cotemporaries, not confining its works only to this immediate locality, but extending it to a wide range through this and adjacent States, aggregating a trade of not less than \$95,000 annually. The President of the company is likewise President of the Farmers and Mechanics Bank, and well known for his enterprising connection with the progress and development of the resources of this community. The concern takes its standing from those who are concerned in it, and is therefore regarded with the highest favor, as being perhaps the best appointed and most carefully managed Planing Mill in this section of the State.

JOS. WOODWELL & CO.—Hardware, Cor. Wood St. and Second Ave.

Among the many firms engaged in the above line of trade in this city, none occupy a more substantial position than the subject of this sketch. Established March 1st, 1845, as Woodwell and Walker, the latter partner soon retired leaving the firm title as at present. Two buildings 4-stories high, 140 feet in length with two ample basements, are barely sufficient to contain a stock, which rarely runs below a valuation of \$100,000, consisting of every variety of foreign and domestic Hardware, Cutleries, Saws, Shovels and Spades, Harvest and Agricultural Tools, Builders, Machinists, Railway and Cabinet Hardware, Chains, Anvils etc, etc.

The firm which is composed of Mr. Joseph Woodwell and two Sons, W. K. and Jos. R. does a large and increasing business in Railroad supplies, as well as a very extensive retail trade, the result of the long establishment of the house, and the extended acquaintance of its members, which reaches with their business into three or four contiguous States. Besides possessing all the advantages above enumerated, this firm have the special agency for the celebrated Nicholson Files, Wood Ornaments and the most complete assortment of Iron, Steel, Brass and Copper, Wire to be found west of the mountains. From 14 to 20 employees are regularly retained in the various department of the business, which involve sales of from \$150,000 to \$200,000 per annum. The general characteristics of this house for financial solvency, thorough conception of the business in which they are engaged, together with a high standard of personal and commercial honor, would reflect credit upon any community, and make the untarnished record of nearly thirty-five years a source of private and public satisfaction.

WESTERN INSURANCE COMPANY,—Granite Building, 81 Wood St.

This old and reliable Company was incorporated by the Legislature of Pennsylvania, March 20, 1849, the first company chartered in this city after the disastrous Fire, that occurred on the 10th of April 1845, and now the oldest Fire and Marine Co. in the city, with cash capital of \$225,000, Assets \$317,607.25. The management of this sound and prosperous company is not excelled by any other similar organization in the country. The directors were truly fortunate in the selection of a financial officer and general business manager in the person of Wm. P. Herbert, secretary, who has been in charge of the business over a quarter of a century. The vast number of risks, that he has handled, the enormous amount of losses paid, the prompt adjustment of claims when necessary, has given the Western an enviable reputation, both at home and abroad. The careful and judicious course pursued by the management, has been the means of making the stock of this company one of the best for investment to be found in the city, when we learn that they have paid their stockholders in dividends nearly four dollars for one invested. As an illustration of the character of the management, and probity in conducting the very large and increasing business of this company, we may refer to the showing of the handsome amount of Assets of \$317,607.25, after paying losses in 30 years of their existence of nearly 1,000,000.

The managers have given evidence of rare ability in selecting business, and their judgement has been verified in the success, which has been acquired. The business of the Western has been principally of a local character, and within reach of the officers, that an accurate examination of each risk could be had. We herewith present the names of the board for the year 1879:

President, Alexander Nimick, V. President 1st National Bank, of firms of Nimick & Co., Phillips, Nimick & Co. and President Jacobus & Nimick Mfg. Co., etc. etc. R. Miller Jr., President Monongahela Bridge company, David M. Long of Hubbard, Bakewell and Co., John R. McCane, President Union National Bank, Charles J. Clarke President Library Hall company, Capt. Wm. S. Evans, President of Missouri River Transportation company, Phillip Requier of Requier and Brothers, Wholesale Grocers etc., William Morrison, Capitalist, H. Sellers McKee of McKee and Bros., Glass Manufacturers, John B. Jackson Member of city council, Hon. L. K. Moorehead, President of Monongahela Nav. Co. and President of Chamber of Commerce, Hon. Edwin H. Stowe President, Judge com. Pleas No. 1, Wm. Frew, first Vice President Standard Oil company. In this list are found the names of solid men of Pittsburgh, and of men who are the architects of their own fortunes.

THE WESTINGHOUSE AIR BRAKE CO.

Office & Works: Liberty Street, Between 24th and 25th Streets.

It is tolerably safe to say that no one special branch of our manufacturing industries has disseminated more widely a knowledge of Pittsburgh and its characteristics, than the Westinghouse Air Brake Co. Certainly none more entitled to copious mention in any work professing to display in its proper light, the resources, advantages and development of the Iron City. Based upon the masterly invention of George Westinghouse, Jr., the manufacture of the Automatic Air Brake was commenced by the patentee and Ralph Bagaley, Esq., nearly ten years ago, creating an absolute revolution in the matter of handling railroad trains, greatly increasing the safety of travel, and reducing running expenses, with many other striking advantages. The importance and novelty of this unique appliance, attracted at once universal attention resulting in the formation of an incorporated Joint Stock Company, with a capital of \$300,000 paid in, for the purpose of a more extensive manufacture of the Air Brake. Of this Association, Geo. Westinghouse, Jr. was elected President, Ralph Bagaley Secretary and Treasurer, and T. W. Welsh Superintendent, and under the management of these gentlemen to the present time the company has attained an almost unparalleled degree of prosperity, extending its operations not only throughout the entire United States and Canada, but introducing its inventions into Mexico, Cuba, South America, England, France, Germany, Russia, Scotland, Ireland, Australia, New Zealand, India, and in fact in almost every country in the world where railroads are in process of construction, or have become a necessity.

The works of the corporation are unusually complete in every mechanical detail, they occupy an area 100x264 feet, containing two engines and boilers aggregating ninety horse power, and fine machinery especially invented or designed for the work performed. One hundred and fifty skilled artisans are constantly employed, occasioning an annual disbursement to this source alone of \$34,000. Besides the construction of the original Automatic Air Brake, other devices involving much the same principle have been invented by Mr. Westinghouse, covering Train Brakes, Freight Brakes, Westinghouse and Smith Vacuum Brakes and Locomotive Driver Brakes, all of which are manufactured by the company, protected by numerous patents in this country and abroad.

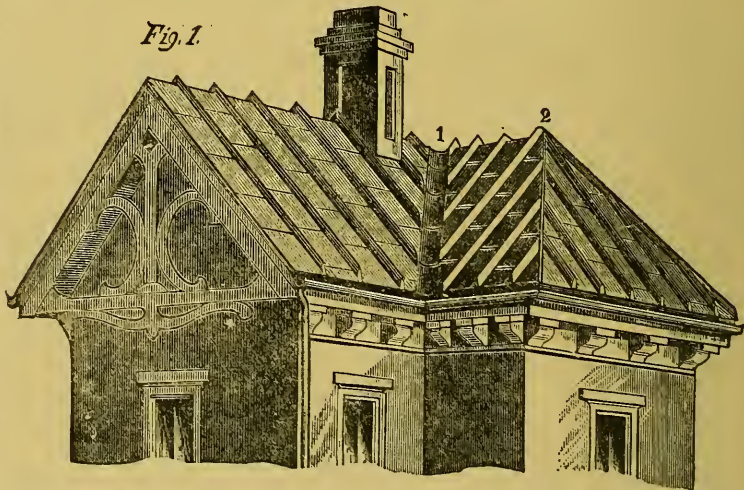
Geo. Westinghouse, Jr. is a native of Schenectady, N. Y., and is still a young man. He acquired his knowledge of mechanics in the Agricultural Implement Works of his father in his native city, but removed to this city in 1868, where after combatting numerous discouragements he finally established the foundations of a signal success.

Mr. Bagaley is a native of Pittsburgh, his father Wm. Bagaley, Esq., was one of the most talented business men this city ever produced; methodical, enterprising and comprehensive in character, he was twenty-five years ago a representative man, and did as much perhaps as any one, in advancing the prosperity of this community. Mr. Ralph Bagaley from the inception of his business career has been constantly engrossed in the manufacture of machinery in some of its many branches. As one of the projectors and officers of the Westinghouse Co., as well as proprietor of the Pittsburgh Evening Telegraph, he is widely known, and this in connection with various interests in financial and civic institutions has given him an influence always justly exercised and well deserved. With an annual revenue averaging half a million dollars, and a practical usefulness almost philanthropic, it is not a matter of surprise that the Westinghouse Air Brake Co. occupies a place in the Industries of Pittsburgh as honorable as it is well merited.

A. NORTHROP & CO.—Sheet Iron Roofing & Building Materials, 97 1st Ave.

Among those industries contingent upon or springing from the Iron trade, and the material outgrowth of improvement and invention may be classed the enterprise of the above firm, which is of such a character and of so great a usefulness as to entitle it to more than mere mention in a publication, devoted exclusively to a detailed display of the resources of Pittsburgh. Composed as a firm of A. Northrop and Henry S. Northrop his son, both are natives of Ohio and were established in business at Elyria in that State for 25 years, prior to their removal to this city. A finished mechanic in Tin and Sheet Iron, with a comprehensive knowledge of how these materials should be worked to secure the best results. Mr. A. Northrop became

Fig. 1.



inventor and patentee of certain improvements in Iron Roofing, Siding and Ceiling, that must eventually effect a vast change in the method and expense of constructing buildings of every description, and which are now producing radical alterations and advantages. By the mode of application introduced by this house, Iron Roofing becomes not only impervious to the action of water and fire, but ornamental and durable to the last degree as well as exceedingly economical. Some of the advantages claimed for it, which claims are substantiated by the strongest testimonials and the most disinterested authorities, are that it not only possesses the features above referred to, but screws through the Sheets, can be perfectly fitted to chimneys, sky lights, hips, valleys and gutters. One of the great advantages of this method lies in the fact, that the Roof can be taken apart, moved at pleasure and utilized as often as desired, and is so prepared for shipment with printed instructions, as to be easily applied by any ordinary mechanic. The same advantages hold good in regard to the siding, which affords a flawless protection to all weathers and all climates, as well as adding great strength to the structure. The ceiling is perhaps the best ever devised, both in appearance and for the relief afforded from falling plaster, the breaking off, of which is only a question of time. Besides the manufacture of this valuable invention A. Northrop & Co., are large manufacturers and dealers in Sheet Iron Cornice, Gutters, Fire-proof Shutters, Roofing, Paint, etc., etc. Their facilities are extensive and a rapidly increasing trade, which extends all over the United States and Canada, demonstrates the favor with which their improvements are being received and appreciated. To those intending to construct new edifices or repair old ones, this firm is most heartily commended, their entire business policy being characterized by thoroughness, promptness and probity, their work speaks for itself wherever known.

CHARLES FREIL,—*Soda and Mineral Waters and Bottling House, 956 Penn Ave.*

The bottling business, as conducted by Mr. Charles Freil at No. 956 Penn Avenue, is entitled to more than a passing notice in a work devoted to the business industries and interests of the Smoky City. Established in 1867 by the present proprietor, these works now occupy two spacious buildings, one, 24x120, at the location named, and one fronting on Liberty Street, 30x100 feet. They have all the apparatus and appliances for carrying on an extensive business in the manufacture of Soda and Mineral Waters, Sarsaparilla, &c., and for bottling Ale, Porter, Cider and Lager Beer. They have a capacity for bottling 2000 dozen bottles per day, and the works are as complete and well arranged as any in the West. Mr. Freil keeps four wagons constantly employed in delivering goods, and his trade extends through the two cities, Western Pennsylvania, Eastern Ohio and West Virginia. Mr. Freil was born in Londonderry, Ireland, in 1846. He came to the United States in 1860 without means, working his passage to this country. He at first worked on a farm, afterwards on the river and in several different branches of industry, until he accumulated sufficient capital to establish himself in business. He opened a tavern in 1865, and met with gratifying success until 1867, when he sold out and embarked in his present business, in which, by energy and enterprise, he has accumulated considerable property, owning the buildings in which he is located, and other property in the city. The success that has attended Mr. Freil's enterprises in business, and the prominent position attained in the business community, starting without means, is an indication of great ability and energy. He is a gentleman, highly respected and esteemed by all who know him, for his general qualities, and upright, honorable life.

GEO. DUNCAN & SONS.—*Glass Manufacturers, 10th St. South Side.*

In a work devoted to a minute display of the resources and advantages of this community, the Glass manufacturing industries must occupy a position of importance commensurate with the prosperity and general development of Pittsburgh traceable to this source. Conspicuous among those firms that have added no little to the celebrity of our products in this department of trade, the house of Geo. Duncan & Sons must always occupy a place that, in many respects, eclipses all competitors. This firm was originally established, in 1866, by Ripley & Co., assuming its present title in 1874, and composed individually of Messrs. Geo. Duncan, Jas. E. Duncan and A. H. Heisey, all practical glass makers, with a comprehensive knowledge and extended experience in the business, and all natives of this city, the senior partner having been engaged in this vocation for over a quarter of a century. For the specialties, to the perfect production of which this house is devoted, it has achieved a wide spread and splendid reputation, distancing all competitors in the manufacture of Table and Bar Glassware of chaste and elegant designs, finished to a wonderful degree of excellence; engraved, cut, stained and etched in such a manner by new processes and labor saving methods as to rival in appearance the finest cut glass, at a vast reduction in price. It is not saying too much to assert that in the production of Table Sets, Elaborate Lamps, and superior Bar Goods the firm of Geo. Duncan & Sons can not be surpassed.

The plant of the house is extensive and occupies 18 lots, covering a total area of about two acres, subdivided into factories, mould shops, packing rooms, stock and sample rooms, offices, &c., &c. A powerful engine and boiler are required to drive the machinery, and 150 skilled artisans are employed at an average outlay of \$1400 per week. With these and other unequalled facilities the firm transact a trade averaging \$150,000 per annum, and extending throughout the United States, Mexico, Cuba, South America, and other foreign countries, contributing greatly to the general wealth of this community, and fostering to a large degree its material prosperity. As a firm the house of Geo. Duncan & Sons is regarded as being at the head of the trade, and is justly entitled to the high consideration, resultant upon an honorable and enterprising career.

METCALF, PAUL & CO.—*Verona Tool Works, Office, No. 1 McCance Block.*

A branch of those great Iron Industries that have made Pittsburgh the center of this production in the United States, the house of Metcalf, Paul & Co. can not properly be omitted from a work exclusively directed to a detailed description of the resources, development and special advantages of this city. Established by Messrs. O. Metcalf and J. W. Paul under the above style in 1873, the efforts of the firm were directed to the manufacture of solid steel tools, particularly such as are used in the construction or repair of Rail Road tracks. The works were erected at Verona, a few miles from the city, on the Allegheny Valley E. R., and specially adapted in construction to the required purpose, being equipped with the best mechanical appliances that every modern improvement could suggest, and such processes adapted for the more perfect preparation and finish of the material used, as should secure a product absolutely flawless. In the attainment of this desideratum the firm met with the most signal success, and the almost instant celebrity that followed led to a trade that at the present time is not limited to the United States, but extends to Brazil, South Africa, and the West Indies, the South American trade having grown to such proportions as to require the establishment of a branch office at Rio Janeiro. As manufacturers of solid steel tools exclusively, the firm of Metcalf, Paul & Co. have really no compeer in this country, and for lightness, strength, durability and economy their work is recognized and appreciated by every constructive engineer for its matchless superiority. The works at Verona are ample in extent, covering an area of nearly half an acre, one 50 horse power engine is required to drive the machinery, and 43 skilled operatives are constantly employed, making a disbursement necessary to this source alone of about \$60,000 annually. The rapid increase of the business of the house at home has kept equal pace with its foreign operations, and for greater convenience in transacting trade with the West and North-West, a tributary establishment, trade house and office, at No. 40 Dearborn St., Chicago, affords in this direction all the necessary facilities.

Mr. Metcalf is a native of Pittsburgh, born in 1840. He has always made his permanent residence in this city, and, within the range of his influence and domain, has to an equal extent with any other one citizen fostered and conserved, in every possible way, the interests of this city. The financial, clerical and general business management of the house fall to his care, while Mr. Paul, who is also a Pittsburgher by birth, gives his personal supervision to the operative, manufacturing departments of the work, for which he is admirably fitted by an enlarged experience and thorough education as a mechanic. During its comparatively short existence as a firm, the house of Metcalf, Paul & Co. have achieved a success so signal and complete as to rank them with the best and most extensive manufacturing enterprises in this or any other city. Closely identified with Pittsburgh, its development, industrial growth, and general prosperity, promoting all these to the greatest degree possible, the proprietors of the Verona Tool Works are deservedly awarded the highest consideration on the part of the community for which they have done so much.



T. W. WHITELEY,—*Commission Merchant, Terra Cotta Ware, &c., 244 Penn Ave.*

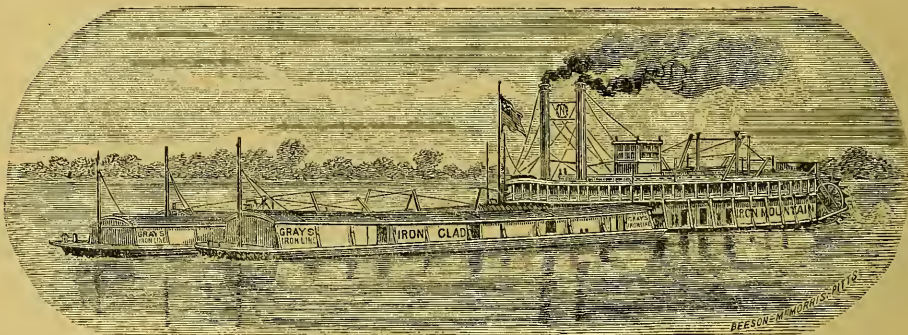
The rapidly increasing demand for Terra Cotta Ware in the shape of Flues, Sewer, Stove Pipes, &c., and the absolute necessity of these appliances in all modern structures, suggested the idea of establishing a commission agency in this city for the sale and storage of such merchandise. About one year ago, therefore, Mr. Whiteley commenced business, representing the Excelsior sewer pipe and fire brick works of P. Connor & Bros., located at Elliottsville, Jefferson county, O., and other leading potteries in Ohio, including other articles in the same line, such as Fire Brick, Tile, White Lime, Calcined and Land Plaster, Cements, Stone Crockery, Lawn Vases, Pots, &c. The wisdom of his enterprise has already been amply shown by an annual trade of over \$20,000, which is fast developing into larger proportions, and affords conveniences to the general public locally and at a distance for making purchases at lowest rates heretofore unobtainable. Those who desire any information with reference to such particulars in connection with the business not otherwise easily got at, will find Mr. Whiteley by correspondence or otherwise, ready to import any knowledge within his jurisdiction.

CHARLES MAGINN & CO.—*Wholesale Confectioner, 183 Liberty St.*

Mr. Charles Maginn, proprietor of the "Liberty Candy Works" and wholesale Confectioner, has been engaged in business under the present style, and at his present location since 1875. Previous to that time, from 1857 until he established this house, he was a partner in the firm of E. and C. Maginn, a concern which transacted an annual business of some \$250,000. Since starting in business for himself, Mr. Maginn's trade has steadily increased, until his yearly sales reach the handsome sum of \$90,000, with fair prospects of rivaling the business of the old firm in cours of time. He occupies four floors and basement of the elegant stone front Warehouse, 22x110, located at No. 183 Liberty Street, as manufactory and sales rooms, and employs about twenty-five hands in the various departments of his establishment. His trade extends through Pennsylvania, Eastern Ohio, West Virginia and Maryland, and compares favorably with that of any other house in the same line. His stock comprises every description of Fine Confectionery, Canned Goods, Foreign Fruits, Nuts, Sardines, etc. etc.

JAS. W. ARROTT,—*Fire, Marine & Life Insurance Agent, Office, 167 Wood St.*

In presenting the name of Mr. Arrott to the public, it will at once be recognized as one well known to all, as associated in giving security to the citizens of Pittsburgh and Allegheny county against the ravages of the devouring element. His name is a guarantee, that in case of loss, promptness will follow the amounts of damage ascertained, and quick payment will ensue, hence his popularity and success in this city. During the last 20 years he has written policies amounting to almost untold millions of dollars, in the same time he has adjusted losses running up to hundreds of thousands of dollars. In his agency he has employed three clerks, who are constantly engaged in attending to the details of the office, whilst Mr. A. gives his whole time to the general management. The following list comprises some of the staunchest Companies in this country and Europe, which are represented by him; viz.: Continental Fire Insurance Co.; German American Insurance Co.; Guaranty Fire Insurance Co.; Hanover Fire Insurance Co.; Hoffman Fire Insurance Co.; Merchants Fire Insurance Co.; Niagara Fire Insurance Co.; Queen Fire Insurance Co.; Royal Canadian Fire Insurance Co.; Roger Williams Insurance Co.; Shawmut Insurance Co.; New York Life Insurance Co.



GRAY'S IRON LINE,—*Freight Transportation, Office, 94 Water St.*

Contingent upon the industrial manufactures of Pittsburgh, Gray's Iron Line is entitled to particular mention in any records, from which may be derived a detailed knowledge of the various resources of this city. As the Pioneer Line of Barge Transportation of general merchandise from Pittsburgh it was established in 1863, with a view to afford shippers greater facilities in the river transportation of heavy freights to points in the West, North and South-West from which they would otherwise have been virtually cut off, the Iron Line at once became a permanent institution, conducive in the highest degree to the advantage of manufactures, and consequently to the entire community. In the line of heavy freight transportation the company gives special attention to that of Steel and Iron Rails and Pittsburgh manufactures from Pittsburgh to all points. The Proprietors of what has now become an enterprise of more than ordinary importance, are Capt. R. C. Gray and Capt. M. W. Bettzhoover, the former acting as general manager, W. P. McConnell and J. H. Dunlap being respectively secretary and superintendent.

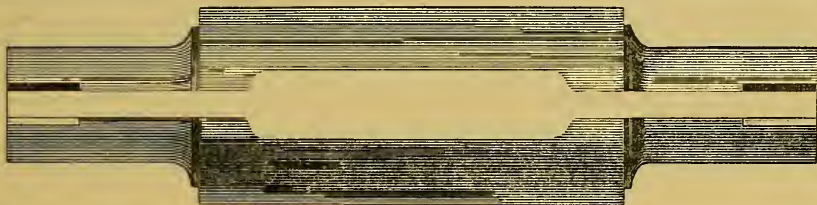
As the largest undertaking of the kind in this part of the country for inland navigation, and river transportation the facilities of this company are somewhat extended and consist of the Steamers Iron Mountain, W. C. Gray Master; Fearless, Thos. Greenlee, Master and Ironsides, Jas. McDonald Master, 35 model barges for regular freights, Iron etc., etc., and 5 barges designed for carrying bulk grain, having a total capacity of 140,000 bushels with a tonnage of 1400 tons each. For safety, speed and economy this Line has justly achieved a matchless reputation, as may be inferred from the continued addition's made to it, and its long and useful career. No men in Pittsburgh are better known, or more highly esteemed than Capts. Gray and Bettzhoover. Their connection with the growth and prosperity of the Iron City has been a very intimate one. Grays Iron Line is but one of many beneficial enterprises to which they have lent their names and advanced their capital, employing in this branch of their business, alone, over 100 men. They may well be entitled to consideration as promoting in no small degree the industries of Pittsburgh.

JAMES McQUISTON & CO.—*Pittsburgh Galvanizing Wks., 26th & Railroad Sts.*

A very important industry contingent upon the use and manufacture of Iron, adding to its durability appearance, and adapting it for many purposes otherwise out of its range, is the process of Galvanizing a business of which Messrs. James McQuiston and Co. make a successful speciality. Established in 1871 at the present location, the firm was at first McQuiston & Kraft, the latter however withdrawing in 1873 left the title of the house as at present, the company being nominal. The plant is a very extensive one, and covers an area of nearly one acre, being supplied with every aptitude and apparatus necessary for the effective conduct of the business. The perfection, which the skill and assiduity of Mr. McQuiston has secured in results, may be illustrated by the fact, that he alone has been entirely successful in galvanizing Cast Iron Bath Tubs, a desideratum achieved only by superior knowledge and experience, as well as unapproached facilities. The latter may be estimated by the capacity, which is from 6 to 10 tons of Wrought Iron Pipe per day and six tons Sheet Iron, proving that the establishment is second to none in the country, and complete in every respect. The business under the management of Mr. McQuiston is rapidly increasing, a very conclusive evidence of the ability with which it is managed, and the thorough excellence of the work turned out. When in full operation 20 hands are employed in the work, many of whom are skilled and experienced workmen. The enterprise of James McQuiston & Co. is heartily commended as adding no little to the industrial prosperity of the city, and filling a highly useful and necessary place. Prompt, reliable and enterprising, the firm has acquired a position to which it is justly entitled by the exercise of these characteristics, for which it is widely known and respected. Galvanize 100 dozen Coal Hods per diem.

CARTER BROTHERS & CO.—*Wholesale Grocers, No. 259 & 261 Liberty St.*

In a history of the advance and development of Pittsburgh, with reference to commercial affairs, the Wholesale Grocery trade must always occupy a very prominent position, as having conducted in no small degree to the present mercantile importance of this community. Among those houses whose extended transactions and high standing entitle them to more than casual mention is that of Messrs. Carter Brothers & Co., Wholesale Grocers and Coffee Roasters, making specialties of Teas and Tobaccos. Established Jan. 1, 1867, by John A. Carter and David A. Carter under the above style, the "Co." being nominal, the firm soon took a conspicuous place for its energy and the rapid increase of its business. Commencing with but a comparatively small capital, the house at the present time carries an average stock of from \$40,000 to \$50,000, while their yearly sales will compare favorably with that of any other house in the same line of business. The ample business premises of the firm are situated as above, and consist of one large building, 35x114 feet, with steam elevators for hoisting, and steam engine for grinding and wasting coffee. Nine hands are employed in the various departments, the trade of the house extending through Pennsylvania, Ohio and West Virginia. The partners are natives of Washington Co., Pa., came to Pittsburgh 12 years ago, and since that time have taken an active part in promoting the general advantages of the city, and have gained a reputation for themselves that entitles them to the esteem and consideration of the community.



TOTTEN & CO.—*Fulton Foundry, Cor. 24th and R. R. Sts.*

Pursuing a special branch in the conversion and manufacture of iron, and conducting a business of great magnitude and importance to the industrial prosperity of the city, the house of Totten & Co. is not to be omitted from a work seeking to set forth in detail some adequate exhibit of the resources of Pittsburgh. The business which is now conducted, under the above style, by Messrs. Robt. C. Totten and N. B. Hogg, was originally established by the former in 1863, and from its very inception has not only been eminently successful, but achieved a special position and reputation of its own, for the manufacture of Hollow Chill Rolls, and Rolling Mill Machinery. In the invention of the Hollow Chill Roll, (protected by letters patent 1869 and 1877,) Mr. Totten became the discoverer, after years of labor and investigation, of one of the most valuable appliances known in the manufacture of iron. It is not the intention in this work to explain the principles upon which this roll is constructed, or from which its superior merits are derived. The success attendant upon its introduction to the trade is the highest guarantee of its usefulness, 90 mills having been supplied with them during the past two years, over 520 rolls being in operation. Of these Messrs. Totten & Co. are sole manufacturers, and possess ample facilities for supplying them in any length, and from 5 to 36 inches in diameter. Besides this important improvement the firm are the only manufacturers of Chilled Rolls cast to shape, securing advantages in the uniform density and durability, of grooved surfaces never before attained, and possessing other merits that have stood the severest tests during the past 12 years.

The plant of the firm is located on 24th St., and covers an area of some three acres, the machine shop being 70x120 feet, and the foundry 85x225 feet, containing much machinery of remarkable size and power, including can turn fly wheels twenty-five feet in diameter, chill rolls 30x108 inches, one planing machine ten feet wide by thirty-six feet long, being the largest piece of mechanism of the kind in the United States, except one at the Charleston Navy Yard, and other appliances, operated by two powerful steam engines and boilers. Some idea of the capacity of the works may be indicated by the fact that a plate for moulding plate glass was constructed here, weighing 84,000 lbs., which was planed on one side to a perfect surface, being perhaps the most ponderous work of the kind ever executed in the country. In the manufacture of Heines Combined Friction and Cog Pinions the firm enjoy a monopoly, and are noted as well for their various makes, Roll Pinions, Gearings and Mill Machinery. The senior partner was formerly connected with the Fort Pitt Foundry, whose products in the casting of heavy ordnance have a world wide repute. Here Mr. Totten acquired the practical and metallurgical knowledge that has been of such manifest usefulness in his present enterprise, and which, for more than a quarter of a century, has connected him with the industrial interests of Pittsburgh. The testimonials and flattering commendations received unsought by the firm during the past few years, would fill many pages of this volume. It is enough, however, to say, in this connection, that no house occupies a higher place, or is more entitled to the position achieved than Messrs. Totten & Co. of the Fulton Foundry.

Messrs. Totten & Co. are now filling an order from England for Hollow Chill Rolls, and expecting other orders from Europe. They are largely engaged in the manufacture of Nail Machines, having erected most of the largest Nail Factories West of the Allegheny Mountains, as well as some in the East. They have recently sent to England Nail Machinery for cutting steel nails, a branch that must also become prominent in the near future in this country. They have erected some 30 first-class Rolling Mills in the past 15 years, more than any other similar establishment in the country, and of necessity have the most modern patterns for this class of work.

S. MORROW & CO.—Manufacturers of Street Lamps, Cor. Market St. & First Ave.

The firm of S. Morrow & Co. is of late formation, but this statement should not be construed to convey the idea that the members of the firm are novices in the line of business in which they are engaged. The founder of the house, S. Morrow, Esq., was, previous to his death in February, 1878, for 45 years identified with the manufacturing interests of this city, and established the business of which his present successors are now the worthy representatives. The new firm, doing business under the style of "S. Morrow & Co.," is composed of Mr. J. Liloud Lytle and Mr. James Morrow, the son of the former proprietor, who succeeds as a partner, with a full knowledge of the lamp business and the wants of trade. With every facility before possessed, and the addition of new and improved machinery, and the infusion of fresh vigor and enterprise, the present firm may be relied upon as not only keeping up the standard of perfection in the products that characterized the house of S. Morrow, but making advancement in every detail that the times require and pursuing a course creditable to themselves and to the Iron City. To this end they will continue to manufacture the Round Globe Street Lamp (of which S. Morrow was the inventor), which has long been acknowledged to be the neatest and most consistent lamp for illuminating streets, parks and entrances that has ever been produced in this country, and other special and ordinary designs for stock in trade and to order, including the Square City Street Lamp, both for gas and with gasoline tank attachment, appropriate for use in city or town. In this line of industry this constitutes the only manufactory of Street Lamps in our city, and have the most complete equipments for carrying on the business West of the mountains. As a firm that of S. Morrow & Co. is of the most highly commendable character, and to old patrons of the former proprietor, and to all others throughout the country, who wish estimates for either public or private contracts, we would respectfully call attention to this house, believing that we are serving the purpose of this work, in so doing, to the greatest advantage to the public.

UNION CHAIN WORKS,—Reiter & Co., 29th and R. R. Sts.

The manufacture of Chain of every description is carried on extensively by the firm of Reiter & Co., at the corner of 29th and R. R. Sts. The present firm was established in 1873, but Mr. Reiter, Sr., has been for many years prominently identified with the manufacturing interests of this city, having been one of the original founders of the La Belle Steel Works. They manufacture in their extensive works, which are well located, conveniently arranged and fitted with excellent machinery, driven by a fine engine, a very superior quality of chains. The greatest care is taken to produce none but first-class work, and no chains of an inferior quality are permitted to be sent out from this establishment, all being submitted to a thorough practical test, before going to their customers. The iron used is the best quality and highest grades to be had. The purpose and design of the firm is to make an A. No. 1 chain, equal in all respects to the most celebrated English brands. Wherever their chains have gone or been used they have given the highest satisfaction. They employ none but skilled workmen, who, by the system of testing employed in the establishment, are stimulated to the greatest care in their work. They manufacture now at the rate of 600 tons of chain per annum, and are having a steadily increasing demand for their products in different parts of the country.

Mr. Geo. Reiter, senior member of the firm, was born in Baltimore, Md., but has for many years resided in Pittsburgh, and has been largely interested in the manufacture of Iron and Steel, and closely identified with other important industries and the general interests of the city. He is well and favorably known, and is a highly respected and honored citizen. Mr. Geo. Reiter, Jr., was born in Pittsburgh, and has grown up in the Iron industries with which his father has been identified. He is the general manager and superintendent of the works. Mr. W. C. Reiter has charge of the office business and books of the firm. Both the sons are young possessed of energy and business experience, and the establishment is one in which the Iron City may feel a justifiable pride. Father and sons, in establishing their enterprise, which in a measure is a new one in this city, bring into its management large experience in a business point of view, and great energy. They are men of the very highest character, and the firm is every way reliable and trustworthy, and fully merits the high esteem in which it is held, and the largest success in their enterprise.

BRIDGE & BOWMAN,—Practical Plumbers, No. 28 West Ohio St., Allegheny.

The Plumbing establishment of Bridge & Bowman, located at No. 28 West Ohio St., Allegheny, was founded in 1871 by the present proprietors. They occupy a three story brick building, 20x70 feet, and employ on an average six skilled workmen. Their weekly pay-roll amounts to about \$75. For the past three years their business has averaged \$18,000 per annum, but previous to the "hard times," commencing in 1876, it would reach a much larger sum. Both members of the firm are practical plumbers, Steam and Gas fitters, and they are general dealers in Gas Fixtures, Lead Pipe, Sheet Lead, Hydrants, Pumps, &c. Their trade is located principally in the city and its immediate vicinity, and will compare favorably with that of any similar establishment. Mr. Bridge is a native of England, and was born in 1839, and came to this country when a child. Mr. Bowman was born in Allegheny City in 1848, and has always resided there.

BAKEWELL, PEARS & CO.—Pittsburgh Flint Glass Works, South Side.

Among those firms which are most intimately connected with the history of Pittsburgh, its infant struggles, growth and subsequent prosperity, sharing and promoting every matter of public interest, the house of Bakewell, Pears & Co. will assuredly take a prominent position. For three-quarters of a century its career has been closely allied to the Glass trade in all its various stages, and to a marked degree conducive to the thrift and importance that places this branch of our manufactures upon so solid a footing. Established in 1808, under the style of Bakewell, Payn & Bakewell, the success of the enterprise, as the first of its kind west of the Alleghany mountains, was assured from its inception. In 1840 the firm name was changed to its present style by the admission of Mr. J. P. Pears, who, for 30 years, until his death in 1874, was one of the most prominent of our glass manufacturers. The present firm, whose individual members are—Benj. B. Campbell, Thomas C. Benj. B. and Harry P. Pears, succeeded to the business in 1878. These gentlemen are descended from the original founders of the enterprise, and may be said to have an acquired as well as inherited knowledge of the Glass trade, which is evidently turned to the best interests of the house, in securing a general superiority of work in those specialties for which the firm has become celebrated. In 1854 the plant of Bakewell, Pears & Co. was removed from its ancient site on the ground now occupied by the B. & O. R. depot to its present location in Bingham St., South Side. In making this change various improvements were made, and the factories considerably enlarged and more perfectly adapted to the modern requirements of the business. The establishment now occupies an area of several acres, consisting of 2 furnaces, 10 pots each; 2 warehouses, 40x125 each, and iron-clad; store house, packing room, cutting shops, offices, and other buildings, supplied with one engine and boiler for driving the machinery—25 horse power, and engaging the labor of 125 artisans and others, necessitating a weekly disbursement of over \$1,400. The wares manufactured by this house are mainly in the line of all descriptions of Crystal Glass and Cut Table Ware, Bar Service, Druggists' Furniture, Lantern Glasses, and all sorts of blown and pressed goods, together with the finest cut, etched and engraved ware, for which they have achieved a reputation unsurpassed, if equalled, by any competitor in the country. With such a product and such a history, it is not too much to assert that the firm of Bakewell, Pears & Co. is regarded in every respect as being representative of the Glass trade, and the general enterprise of the community.

JOHN GANGWISCH, —Allegheny Valley Brewery, Foot of 46th Street.

The annual increase in the consumption of malt liquors, has not only been of the highest advantage to the agricultural producer of grain, but in affording a channel for the occupation of labor and capital, has done much to enhance the industrial thrift of the community, both in the employment of numerous operatives and the suggestion of more temperate and frugal habits, on the part of the public at large. Engaged in this useful industry, Mr. John Gangwisch established the Allegheny Valley Brewery in 1876 after a long, varied and comprehensive experience. Born in Baden, Germany in 1821, Mr. Gangwisch came to the United States when 27 years of age, first having acquired a thorough knowledge of brewing both in a practical and theoretical manner. Here he worked for many years as foreman in the establishment of John Beck, the pioneer brewer of this city, engaging subsequently in business for himself, in company with two others, as partners, and purchasing a planing mill on Liberty St., which was fitted up and adapted for use in his special vocation. This property being purchased eventually by the P. R. R. Co., he afterwards erected the Union Brewery before the construction of the present plant. The Allegheny Valley Brewery is one of the most prominent establishments of the kind in the city, it represents an investment of over \$50,000 and is adapted to the business, by the introduction of every modern appliance or appointment necessary for the perfection of the product, and supplied with ample cellars 60 feet deep, surmounted by ice houses, securing at all times a low and even temperature. The buildings are extensive and cover, in connection with yards and ice ponds, an area of not less than one acre, having a capacity of 10,000 barrels, at which it is now running, with a large local trade, to supply which three wagons are required, heavy shipments being made daily to the surrounding country.

Mr. E. J. Reinhardt, a nephew of Mr. Gangwisch and for many years book-keeper for the Smithfield National Bank, has charge of the books and general business of the concerns, and is well fitted for the responsibilities of the position. The trade mark of the establishment as indicated in all their barrels, is blue and green, while the excellence of the Beer produced is testified to by the favor it has secured, being considered equal in flavor, color and purity to any brand made in the United States.

T. & J. T. McCANCE, —Merchant Tailors, No. 196 Liberty St.

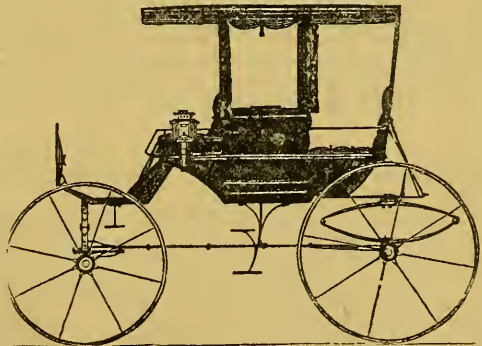
There is perhaps no firm in Pittsburgh, in the same line of business, that is better or more widely known than that of Messrs. T. & J. T. McCance. Established in 1845, and during the 34 years that have since elapsed, identified with the growth, industries and prosperity of the city, the house is certainly deserving of more than brief mention. With ample facilities for a large and increasing business the house of Messrs. McCance have more than ordinary advantages to offer their customers. As importers direct of the finest fabrics of France and England, an unusually choice assortment of these goods will always be found in hand, together with the best products of American looms. Twenty skilled operatives are employed in the custom department, two cutters and several sewers. The premises are of the most spacious, consisting of sales and exhibition room, 26x110 feet, located as above, stocked with the choicest goods known to the trade. As a firm the house of T. & J. T. McCance occupy a position, and have attained a repute, that emanates from years of toil and patient endeavor, supplemented by those qualities of commercial and personal integrity that have always been at the basis of their transactions, entitling them to the esteem and respect of the community, with whose progressive development they have been so closely allied.

AVERMANN & CO.—Dry Goods, Trimmings, Carpets, Wall Paper, etc.

The very large and prosperous establishment of A. Hermann & Co. is located on Penn Avenue, between 33d and 34th Sts., with a branch on same avenue, near 41st St., at both of which places they are doing a large and prosperous trade. The business was first started by B. Avermann, in 1867, near the present location, in a small room, and with small capital. It increased so rapidly that in a short time he was compelled to move into the large store room now occupied by the firm. It is 20 feet front by 75 feet in depth, and is filled with a very large, complete and choice assortment of the various goods in their line to the amount of \$20,000. Mr. Rud. Westerman and Mr. Henry Avermann were admitted into partnership with Mr. B. Avermann after removal to the new rooms. The firm is one of the most prosperous, in their line of trade, in that portion of the city in which they are located. The business has been from the commencement in the charge of Mr. Henry Avermann, to whose popularity, enterprise, ability and business tact is mainly due the great success of the establishment, and the large annual business, amounting to \$25,000, they are now doing. The branch store near 41st St. is in charge of a younger brother of Mr. H. Avermann, who also displays the same business qualifications as his brother, and is doing a very fine business.—Mr. Bernard Avermann, the senior member of the firm, was born in Germany in 1824, and came to the United States about 32 years ago; has worked nearly ever since at Schoenberger's Iron Works, accumulating, while working there, his capital to start the business of which he is now the honored head, and from which he is now deriving so handsome an income.

G. A. SCHNABEL, —Carriage Manufactory, Penn Ave. & 31st Street.

Among the many branches of industry, which have contributed to the wide spread reputation of Pittsburgh as a manufacturing centre, that of Carriage Building in its various branches, is one of the most important. The superiority of Pittsburgh Wagons and Carriages is acknowledged wherever they have been used. One of the leading manufactories in this line, is that of Mr. G. A. Schnabel, whose extensive works are located at the corner of Penn Ave. and 31st Street. The business was established in 1860 by Mr. Martin Schnabel, father of the present proprietor, who conducted it until his death, which occurred in 1873, when Mr. G. A. Schnabel succeeded. The main buildings are two in number at the location named, one 24x65, and one 48x150 with numerous other smaller buildings and a spacious yard. Mr. Schnabel carries a stock of about \$10,000 and manufactures every description of Light Carriages, Express and Road Wagons, Spring and Coach Top Wagons, and Vehicles of every kind required, paying especial attention to ordered work. He aims at the highest degree of excellence, and the greatest durability in all work turned out, and the reputation of this establishment for reliability keeps a full force of skilled workmen employed all the time, and the trade which is principally local at present, is gradually extending to different parts of the country. Mr. Schnabel was born in Pittsburgh in 1854, and was educated to the business in his father's establishment, acquiring a thorough and complete knowledge thereof, on every detail and department. He is a young man of fine business ability and attainments energetic, enterprising reliable, and is pushing his already large business with commendable zeal and vigor.



THOMPSON, EPPING & CARPENTER—*Keystone Steam Pump Works, No. 882 Penn. Ave.*

In the manufacture, design and invention of Steam Pumps, it is safe to assert that no firm in the West has achieved a higher reputation than that of Messrs. Thompson, Epping & Carpenter, whose plant is located as above, and who, from the extent and character of the business transacted, are entitled to special mention in this work. The firm which was organized in 1877 succeeded to the trade and effects of the Cooper & Keystone Works, which were established in 1863. The premises occupied consist of one large two-story main building, 100x120, and a foundry less extensive, covering an area in all of over half an acre, divided into machine shops, pattern rooms, foundry, &c., &c., employing 25 skilled workmen, and forming the base of operations for a business that ranges over the entire United States. The members of the firm are all natives of Pittsburgh, and are as follows: J. D. Thompson, Henry Epping, and W. H. Carpenter, the latter having charge of the general business; the general management being in the hands of Mr. Epping. The products of the house are mainly in the line of Steam Pumps, many of which are manufactured under letters patent owned by and awarded to the firm. In Cooper Pumps may be mentioned the Plunger Boiler Feed Pump, the Piston Pump, the Piston Mine Pump, the Plunger Mine Pump, and the Vertical Pump, besides the Keystone Steam Pump and the Epping Direct Acting Pump—all being adapted and specially fitted for certain uses, which they perfectly subserve, as shown by testimonials from the highest authorities, including engineers, mechanicians and manufacturers that would occupy many pages of this work. In addition to the manufacture of Steam Pumps, Brass Castings for Rolling Mills, Engine and Railroad Work, are made to order, the facilities of the establishment insuring the best class of work at the least possible expense. In every respect the house of Messrs. Thompson, Epping & Carpenter is a most desirable one with which to establish permanent business relations. Prompt, thorough and honorable, no firm can offer more pronounced advantages, or guarantee, in the accomplishment of every work undertaken, more satisfactory results.

BIRMINGHAM FOUNDRY and Machine Shop—*Manufacturers of Rolling Mill Castings, Castings for Glass Works, Etc., Cor. 21st and Mary Sts.*

In the iron interest, Pittsburgh stands specially prominent; her iron products are unsurpassed wherever introduced. Among the prominent and reliable establishments in this branch of industry, and one that is entitled to a brief notice in this volume, is that above mentioned; not because of its magnitude or specialties, but for its ample facilities and superior productions. It was established by Geo. L. Fisher, Peter Wentzel, and others. It has enlarged its facilities and kept pace with the times. It has a capital invested of not less than \$50,000. The machinery and material necessary to prosecute the business successfully involves an expenditure of \$15,000. An annual business of some \$30,000 is done, even in these times, when low prices and general depression is prevalent. The works occupy three buildings, with a frontage on 21st of 44 feet, and a depth of 88 feet. In addition to these commodious buildings, the grounds attached and used for business purposes cover an area 120x140 feet. The foundry and machine shop are spacious and complete in all their requirements. Eighteen skilled mechanics are employed, at an expense of \$1,000 per month. The motive power to propel the various machinery is furnished by a 20-horse power engine. The trade of this establishment is principally local and in a healthy, growing condition. The owners are energetic, using every legitimate means to extend and enlarge their trade. They rely for their increase and prosperity on their promptness and the superior character of all work produced. They take special pride in their ability for turning out machinery and castings adapted for glass works. The firm consists of Geo. L. Fisher, D. J. Thomas, and Peter Wentzel. Mr. Fisher was born in Germany in 1839. Mr. Thomas was born in Pittsburgh in 1832. Mr. Wentzel was born in Germany in 1850. He came to Pittsburgh in 1844. They are all well and favorably known in business circles. Their enterprise and good social standing entitle them to respect and confidence as citizens and successful business men.

WILLIAM FAIRMAN—*Undertaker & Embalmer, 41 West Ohio St., Allegheny.*

This is one of the oldest undertaking establishments in the two cities, having been established over half a century ago by Mr. Robert Fairman, father of the present proprietor, who died Oct. 5, 1878, in his 72d year, and successfully conducted the business for 43 years. Mr. Wm. Fairman has been in business for himself some 15 years, but is now conducting the old business established by his father. He occupies a three-story brick building, 18x120, at the location above named, and carries a full stock of Caskets, Coffins, Shrouds, and all things pertaining to the business. He also embalms bodies by the most approved processes, and at reasonable rates. His annual business amounts to about \$10,000 in the two cities and surrounding towns. Mr. Fairman was born in Allegheny City in 1840, and is a lifelong resident of the city.

C. C. HECKEL—*Merchant Tailor, No. 131 Federal St., Allegheny.*

Among the many merchant tailoring establishments of Pittsburgh and Allegheny, we commend Mr. C. C. Heckel, now located at No. 131 Federal St., Allegheny City. Mr. H. has been in business for himself since 1865. His present salesroom is 13x75 feet, and his stock consists of a fine and seasonable assortment of the latest styles and most desirable fabrics for gentlemen's wear of both foreign and domestic manufacture, selected expressly for this market, which he is prepared to make to order into Garments or Suits in the latest and most fashionable manner. Fine Dress Suits, for instance, made in the best manner for \$20, upward. He carries a stock of about \$3,000 to \$4,000, and his annual business reaches \$16,000. He employs 10 first-class workmen, and allows no work to go out of an inferior quality. Mr. Heckel was born in Germany in 1834, and came to this country in 1849.

ISAAC TAYLOR—*Importer and Wholesale Dealer in Dry Goods, &c., 129 Wood St.*

The many advantages possessed by the city of Pittsburgh, as a commercial as well as manufacturing center, should not be overlooked by those who have hitherto regarded it as simply the grand headquarters of the iron and glass trades of the United States. With facilities unsurpassed by those of her sister cities, Pittsburgh has become an important commercial metropolis, and purchasers from abroad are rapidly becoming convinced of the fact that they can purchase Dry Goods and other articles here as low as in the New York or Philadelphia markets, and at a considerable saving of time, freight and other expenses. In connection with the Dry Goods trade, the house of Isaac Taylor, at No. 129 Wood St., may be mentioned as one of the most prominent in our city. Established in 1851, the business since that time has been conducted by Mr. Taylor in person, who now occupies the entire building of four floors and basement, at the number above named, giving employment to seven clerks and assistants, and a number of traveling salesmen, with an extensive trade throughout the western portion of Pennsylvania, Ohio, Virginia and West Virginia. Mr. Taylor imports a portion of his foreign goods direct, and his domestic fabrics are purchased directly of the manufacturers. The various departments of his establishment are well supplied with the most desirable articles required by the retailer or country merchant, and it has ever been his aim to treat his customers in such a manner as to retain their confidence and respect.

J. P. SMITH, SON & CO.—Lamps and Glassware, No. 189 Liberty St.

Pittsburgh is noted throughout the country as the headquarters of the Glass trade of the United States, and that she is justly entitled to that proud position may be readily believed after even a cursory glance through some of the leading establishments of the Smoky City engaged in that line of business. Prominent among her representative houses we may mention that of J. P. Smith, Son & Co., which occupies the entire four stories and basement of the spacious brick warehouse at No. 189 Liberty St., 22x110, and filled from cellar to attic with a magnificently arranged and judiciously selected stock of Lamps in every variety, fine cut Glass Ware, Silverware, Bronzes, Majolica Ware, Vases and articles of utility and vertu in almost endless variety. This house was established in 1860 by J. P. Smith, Esq., who continued the business alone until 1870, when his son, Mr. Wm. L. Smith, was admitted, the firm name and style becoming as above. Mr. S. H. Findley has been the competent and efficient head book-keeper of the establishment since 1869. In 1870 the business transacted by this house did not exceed \$70,000, but in 1878 it had reached the handsome sum of \$168,000. The firm employs seventeen assistants, and in addition to the above, five traveling salesmen, representing the interests of the house all through the Southern and Western States. The business is divided into two departments, wholesale and retail, and the house is considered one of the most solid and reliable in its line in the West.

IRON CITY BRIDGE WORKS,—C. J. Schultz, Prop., 2007 Carson St. S.S.

At the Iron City Bridge Works are manufactured Iron Lattice, Truss, Arch and Plate Bridges; also Iron Viaducts, Railroad Turn Tables, Trestles, &c., Iron Roofs, Steeples, Cranes, Iron Buildings and Bridge Bolts. Work of this nature necessitates spacious buildings, of which this firm possess two: one on Sidney St. in dimension 50 feet front by 156 feet in depth, and one on 20th St., 50 feet front by 120 feet in depth. The power is furnished by a 40-horse power engine, requiring two boilers. The number of hands employed varies necessarily with the amount of orders the firm may have in hand, all of the work being done on order; this number has ranged from 25 to 200. In the perfecting of the work four Departments are made use of: 1st, Machine, 2nd, Forging, 3d, Fitting, 4th, Rivetting. The productions all being made to order, in consequence the amount of stock carried and annual business must fluctuate considerably according to circumstances. The present stock is valued at about \$10,000. Last year's business amounted to \$50,000, but some years has reached \$200,000. The trade of the Iron City Bridge Works is not local only, but extends both East and West. The specialties are Iron Bridges, Iron Buildings and Prison Work.

Mr. C. J. Schultz, the proprietor, was born in the city of Luebeck, Germany, in 1823. He came to New York in 1849, started business in Cincinnati in 1854, from whence he removed his business to Pittsburgh in 1856. Mr. Schultz began his business career alone, and with but small capital. His energy and prudence have built him his present fortune. That he is a man of character, far above the ordinary, is evidenced by the many positions of trust and honor held by him, select City Councillman, Director of Banks, President of Rail Road Company, Manager of Allegheny County Work House and Insurance Companies, Board of Education, and many others indicative of worth and uprightness. The Iron City Bridge Works do not fear to contrast their productions with those of any like enterprises East or West. What they build is graceful in design and outline, complete in finish and detail, and has the rare quality of durability combined with strength.

T. MEHIN WALKER,—Marble and Granite Worker, 161 Lacock St., Allegheny.

Mr. Walker is a thorough practical Marble and Granite Worker, and learned his trade in Allegheny City. He commenced business in his own name in Oct. 1878, with a capital of \$1000. He has three men employed, and his prospects are remarkably favorable. His business has steadily increased since he began, and bids fair to rival that of many other houses. He manufactures every description of Marble and Granite Monuments and Head Stones, White and Colored Marble, Mantles in a variety of elegant designs, and deals in Marble, Plaster of Paris, Lime and Cement. Grave work is the specialty of Mr. Walker, and he has turned out some very elegant specimens of this description of work. Mr. Walker was born in Washington Co., Pa., in 1857, and has been a resident of Allegheny since 1869. His trade extends through Western Pennsylvania, West Virginia and Eastern Ohio.

JAMES LITTELL,—Wholesale Wines and Liquors, 237 Liberty St.

For more than a quarter of a century the name of Mr. James Littell has been identified with the business interests and material prosperity of the Smoky City. The extensive business house of which he is at present sole proprietor was established seventeen years ago as Littell & Mechlin, and continued by them until 1875, when Mr. Mechlin withdrew from the firm. This is generally recognized as the most extensive as well as the most reliable and important establishment of its kind in the city. Mr. Littell imports largely of the finer qualities of pure Wines, Brandies and Liquors, and deals extensively in the best grades of American Whiskies, &c. The specialty of this house is the well known brand of "Old M Whisky," which, for purity and excellence, is unequalled. Mr. Littell occupies the old stand, which, for seventeen years, has been the headquarters of the trade, and is a large and commodious three-story brick structure, 22x200 feet, at No. 237 Liberty St., and his annual sales amount to not less than \$250,000. Mr. R. S. Ogden is the accomplished and reliable bookkeeper of this house, and J. C. Bruff, as traveling agent, represents its interests on the road. The business is in the two cities, the oil regions and the neighboring towns of Pennsylvania, Ohio and West Virginia. Mr. Littell was born in Ohio in 1824, but has resided in Pittsburgh for the past 40 years. He is a member of the city council from the 21st ward, and is at present chairman of the finance committee. He was for some time city gauger, and, in every position which he has been called upon to fill, has done credit to himself and secured the confidence and esteem of his constituents and associates.

KAY, McKNIGHT & CO.—Machinery and Supplies, No. 80 Water St.

The business now conducted by the above named firm was established in 1868 by George H. Stover & Co., Mr. Kay being then in their employ. In 1875 they were succeeded by the present proprietors, who have added largely to the business of the old house. They occupy the spacious four story ware-house at No. 80 Water St., extending through to First Ave., and transact an annual business of about \$125,000. They manufacture the Lewis Patent Hydraulic Jack, and deal extensively in Machinery and Mechanical Supplies of every description, Steam Pumping Machinery, Iron and Wood Working Tools, Belting, Hose, Cordage, Oakum, &c., and are agents for the following well known and popular articles: the Blake Steam Pump, Bulkley Patent Condenser, Camden Pipe Cutting Machine, Chapman Open Way Valve, N. Y. Belting & Packing Co.'s Rubber Goods, Cotton, Linen and Rubber Hose, Iron and Wood Working Machinery, Portable and Stationary Engines and Boilers, American and English Wire Rope, Cordage and Oakum of all grades, Best Oak-tanned Leather Belting, Emery, Emery Wheels and Machines, Spun Cotton, Waste, and Supplies of all kinds for Manufacturers, Steam Boats and Oil Wells. Their trade is located in Pittsburgh and vicinity, and in the States of Ohio and West Virginia. Mr. W. McKnight and Mr. J. C. Kay are the present members of the firm, and were both born in Pittsburgh in 1850. Although young men they have made for themselves an honorable record in the mercantile community, and built up a business which will compare favorably with that of any similar establishment in the United States.

WM. ROWBOTTOM,—*Practical Plumber & Gas Fitter, 260 Beaver Ave., Allegheny.*

As early as 1850 the firm of Bartley & Rowbottom was established in that portion of the city, then known as Manchester. In 1871 Mr. Rowbottom purchased the interest of Mr. Bartley, and has since conducted the business in his own name. He occupies the first floor of the spacious three story brick edifice, 20x100, at No. 260 Beaver Avenue, carrying on the business of Plumber, Gas and Steam Fitter, and dealer in Gas Fixtures, Steam Fittings, Sheet Lead, Lead Pipes, Sewer Pipes, Hose, &c. His business is conducted in three separate departments, the front twenty feet of the premises being used as sales room and office, the next forty-five feet as the working department, and the remainder of the room for storage. Mr. Rowbottom is a practical mechanic, and gives his personal attention to the business. He employs six hands, with a weekly pay-roll averaging about \$50. His stock, which is full and complete in all its departments, is valued at about \$4000, and his annual business reaches from \$12,000 to \$15,000, which is largely of a local character. Mr. Rowbottom was born in Philadelphia, in 1829, but has for many years resided in Allegheny, taking an active interest in municipal affairs. He is at present member of City Council from his ward, and has held that position for several terms, greatly to his own credit, and to the satisfaction of his constituents. He is a public spirited citizen, and an energetic and thoroughly reliable business man, possessing the entire confidence and respect of the community in which he resides.

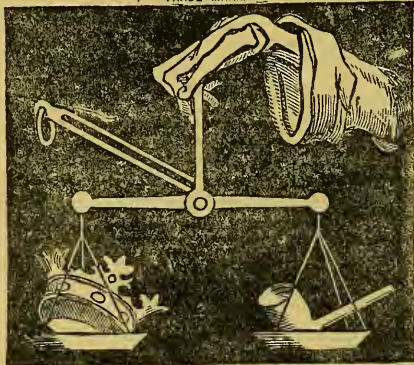
ALLEGHENY COLLEGIATE INSTITUTE,—*30 Stockton Av.*

Rev. Thos. C. Strong, D. D., is the president and founder of this institution, which comprises in its curriculum the regular college course, requiring the usual Freshman, Sophomore, Junior and Senior terms of attendance—a thorough preliminary examination being of course requisite for admission to the Freshman class. The faculty comprises seven teachers, and the Institute itself (which was opened in September, 1878) is located at No. 30 Stockton Avenue, Allegheny City, and fronts on one of the many parks which beautify that city. The attendance, at present, is principally from Allegheny City, but the College will be prepared, at the opening of the next collegiate year, to supply boarding and receive pupils from a distance. Dr. Strong, the president, was born at Flatbush, L. I., May 23, 1824, and is an alumnus of Union College, N. Y., being a member of the class of 1841. He is also a graduate of Rutgers Theological Seminary, class of 1845, and was ordained a minister November 12th of that year, when he at once assumed the pastorate of the Reformed Churches at Rosendale and Bloomingdale, Ulster County, N. Y. He settled at Newtown, L. I., Dec. 12, 1849, where he was called to the pulpit of the Bleeker-street Reformed Dutch Church, at New York city, where he remained until May, 1866. He then removed to Ithaca, N. Y., and from that place went to Aurora, Cayuga Co., N. Y., Dec. 13, 1871. He accepted the presidency of Wells College, and thence removed to this city in August, 1875. Dr. Strong, besides being the president of the Collegiate Institute, is also pastor of the Central Presbyterian Church, Smithfield street, Pittsburgh.

WM. KLEMM,—*Plumber, Gas and Steam Fitter,—3208 Penn Av.*

The most extensive and complete Plumbing establishment in this part of the city is that of Wm. Klemm, at No. 3208 Penn Avenue. His establishment is fitted with engine and boiler, and machinery of different kinds of the newest and most approved styles. Every kind of Plumbing appliances, Pipes, Fixtures, etc., etc., are to be found here, and all kinds of Plumbing work is done in the most prompt and reliable manner. Particular attention is given to fitting houses with gas and water. Mr. Klemm began the Plumbing business, near his present place, in 1865, in partnership with a Mr. Dietrich. In 1870 Mr. Dietrich retired from the firm. Mr. Klemm continued the business, gradually enlarging his works. In 1878 Mr. Klemm's entire establishment was burned out completely, since when he built his present convenient, handsome and well arranged establishment. He was born in Germany, in 1839, came to the U. S. with his parents in 1840, and four years later to this city on a raft down the Allegheny River. Early in life he learned the Locksmith trade, then he learned the trade of Glass Mould Making, after which he learned his third trade, the Plumbing trade, and started in his present successful business in 1865. Mr. Klemm is a gentleman of high character. He has been a member of the School Board of his ward, possessing the esteem of all.

TRADE MARK.

**WEYMAN & BRO.**—*Tobacco.*

No. 81 Smithfield St.

Factory—Nos. 5 & 7 Union St. and 112 Liberty St.

Employing thousands of operatives and producing an annual revenue to this city of not less than \$3,000,000—half a million of which is probably disbursed for labor, the Tobacco business is justly regarded as an interest of the utmost importance, and conducive in no small degree to the industrial and commercial thrift of this community. Among those houses that have been greatly instrumental in promoting the interests of this branch of trade, the Weymans—father and sons—have been conspicuous. More than half a century has elapsed since Mr. George Weyman established the business now conducted by his son, Mr. B. F. Weyman, on behalf of the estate. Beginning in a very small way, the founder of the house, contending with many difficulties, gradually increased his financial resources, extended his operations, and eventually acquired a position in this community that few men have been so happy as to attain, and perhaps fewer still so richly merited. A man of comprehensive views, large capabilities, marked benevolence and probity, Mr. George Weyman was universally esteemed and respected. Conducted under the title assumed at the demise of its originator, the business has continued to prosper, and stands now among the largest producers in the State. They manufacture all kinds of Chewing and Smoking Tobacco, and Snuff—the article made by this firm being considered by the trade and consumers as superior to any other brand. The actual amount of production cannot be obtained. The wholesale part of the business is transacted from the factory, which is located at 112 Liberty St., and Nos. 5 and 7 Union St. The building is a 4-story brick, 40x110 feet, containing all the necessary machinery and appliances for the successful prosecution of the trade; 31 hands are employed here, and the products find a ready sale through Pennsylvania, Ohio, Indiana, Illinois, West Virginia, and other States. The store at No. 81 Smithfield St. is devoted exclusively to the retail trade, and does an extensive business in all grades of Tobacco, making a specialty of Imported and Domestic Cigars. Mr. B. F. Weyman—who, as before remarked, conducts all the operations of the concern—is a native of this city, born in 1842, and has always resided here. His career, both in civil and military life, has been an honorable one. Those having relations with this house may depend upon receiving all the advantages that result from a long experience, large facilities, and undoubted reliability.

STOUGHTON & HAID,--House and Sign Painters, 45 Fourth Avenue.

The members of the above named firm are W. R. Stoughton and L. E. Haid. These gentlemen are both practical workmen, and were formerly engaged in business individually, but in January 1878 associated themselves as partners. This firm occupy two floors and basement in the three story brick building at No. 45 Fourth Ave., 20x45 feet, and give employment to from fifteen to twenty experienced painters, with a weekly pay-roll averaging about \$150. They enjoy a prosperous trade in the city and surrounding districts, and do only the very best work. Mr. Stoughton is a Pennsylvanian by birth, having been born in 1848, and Mr. Haid is a native of Germany, born in 1845. Both gentlemen stand high and enjoy the confidence of the community.

R. BEATTY, SON & CO.--Wholesale Commission Merchants and Flour Dealers. *No. 193 Liberty St.*

The large and spacious edifice at No. 193 Liberty St., 22x120, with four stories and capacious basement, is occupied by the firm of R. Beatty, Son & Co., successors to H. Riddle, Son & Co., Wholesale Commission Merchants for the sale of Country Produce, and extensive dealers in Flour. This house was founded in 1850, and has been in possession of the present proprietors for five years. The members of the firm are R. Beatty, R. W. Beatty and J. Beatty, and six assistants are employed. The annual business of the house is about \$75,000. \$250,000 has been reached when prices were high. They receive consignments from all the Western States, and their trade extends all over the two cities and adjacent territory. To consignments from any section this house afford unsurpassed facilities. Its senior member is well and favorably known in business circles for more than 30 years. Their established connections with shippers in the various large cities of the East secures them advantages that enable them to dispose of all consignments with satisfactory results.

W. H. BAKEWELL,--Awnings and Awning Frames, No. 2 Isabella St., Allegheny.

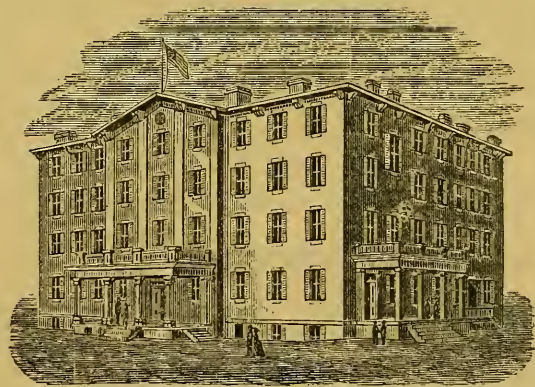
Mr. Bakewell is a thorough, practical Sail, Awning and Tent manufacturer, having carried on one of the leading establishments of New York previous to coming here. He has been at his present location since May, 1877, and has built up a large and flourishing trade in the two cities and among the river men. He manufactures all kinds of house and store Awnings and Awning Frames, Canvas Horse Covers and Feed Bags, Wagon and Express Covers, Tents of every description and size, and attends to Sail-making in all its branches, and the Canvassing of steamboat decks. His specialty is in the manufacture of fine and ornamental Window Awnings. Mr. Bakewell was born in New York city, Feb. 16, 1826, and has resided in Allegheny for the past two years.

S. W. HARE & CO.--Practical Plumbers and Gas Fitters, 1825 Carson St., S. S.

This well-known establishment owes its origin to Mr. S. W. Hare, who commenced here in 1865. His business has been more than usually successful, and as convincing evidence of its growth and extent, we find the amount of stock held by the firm to be almost \$4,000. This, though large, is demanded by the volume of business, which yearly runs up to \$9,000. This speaks well for the quality of the work done at this establishment. Two buildings are occupied by the firm—one of 18 feet front and 30 feet deep; the other being the workshop, having dimensions of 12 feet by 60 feet. Chandeliers for gas and oil, Lead and Sewer Pipe, Lamps, &c., are constantly in stock, and offered at the lowest ruling rates. As the firm consists of practical mechanics, the work intrusted to them is always executed in a substantial manner, and rarely fails to afford the fullest satisfaction. Mr. Hare was born in St. Louis in 1845, and came to this city in 1847. He enjoys the respect, in a high degree, of his fellow citizens.

EAST END HOTEL,--Penn Avenue, East End. James Ives, Proprietor.

In the East End are to be found some of the most elegant residences and beautiful grounds to be found in any city—two of the main thoroughfares leading through this attractive portion of Pittsburgh. The suburbs are laid with wooden pavements, and near their junction is situated the East End Hotel (formerly Eastern Exchange). It is an excellent hotel, affording a delightful home for families and others who desire good boarding and the conveniences of a first-class house, combined with the attractions of the suburbs, and free from the smoke and dust of the city. The house occupies a commanding position, surrounded by ample grounds, with a beautiful lawn in front, provided with conveniences for the comfort and pleasure of guests on summer evenings. The hotel building is commodious and furnished with all the modern conveniences. It is four stories in height, has 100 chambers, and accommodations for 300 guests. Its halls, dining rooms, parlors and sitting rooms are large, well lighted and ventilated, and thoroughly fitted up and furnished. It is a desirable place for private families, business men, persons of leisure and others, and has the attractions of a home, whilst at the same time each one can enjoy retirement and privacy. The convenience of the house to the Pennsylvania Railroad, and the frequent passing of trains to and from the Union Depot, the large amount of business transacted at the stock yards in the vicinity, give the house also a large transient custom. The rates, both for temporary guests and permanent boarders, are exceedingly moderate. The gas used in this establishment is manufactured on the premises. Over 30 assistants are employed in the house, making expense for help about \$450 per month. The proprietor, Mr. James Ives, has had charge of the house since 1873, and personally superintends its management, giving the most thorough attention to all the details, neglecting nothing which can add to the pleasure or comfort of guests. He is a native of England, having been born in Hertfordshire in 1846. Previously to coming to Pittsburgh, he was for a number of years connected with prominent hotels in New York city, and is thoroughly experienced in hotel management. Mr. S. F. Haverstick, clerk, and Mr. S. Goldin, room clerk, are also gentlemen of hotel experience, as well as attentive and courteous to all.



SCHOMAKER & CO.—*Commission Merchants, 198 and 200 Ohio St., Allegheny.*

Since April, 1877, the firm of Schomaker & Co. has been located at Nos. 198 and 200 Ohio St., Allegheny. Previous to that time, Mr. Wm. Schomaker had been for 17 years in business in Pittsburgh. The firm now occupies the large double warehouse at the numbers named above, and transacts a general Commission Business, as well as dealing in Flour, Grain and Feed, at wholesale only. They carry an average stock of about \$10,000, and their annual sales reach the round sum of \$120,000. One bookkeeper and five other assistants are employed in the establishment, and the trade of this house extends through Pittsburgh, Allegheny, and many of the adjoining counties. Mr. William Schomaker was born in Germany in 1829, and came to this city in 1842. Mr. F. D. Schomaker was born in Allegheny City in 1854, and has since resided there.

DOBBS & RISINGER,—*Bent Wood Work, Smallman St., near 25th.*

The firm of Dobbs & Risinger was founded in June, 1874. Mr. Dobbs had formerly been engaged in business at New Brighton, Penn. December 1, 1875, the factory was removed to Wheeling, West Virginia, where it is still located. In February, 1878, they opened their office and warehouses at the present location, where they carry a complete line of Bent Wood Work, and Carriage and Wagon Materials, with home and foreign trade, and they employ latest improved machinery. The members of the firm are Rev. George Dobbs and Mr. Smith Risinger. Rev. Mr. Dobbs was born in Washington County, Penn., in 1814. He was left an orphan at the age of five years, and owes his success to his own energy. He was raised on a farm, and at an early age learned the trade of chair framer. He was subsequently engaged in the coal and lumber business. He started in the Bent Wood business at New Brighton, where he laid the foundation of the present prosperous house. Mr. Risinger is a native Pennsylvanian, and is a carpenter by trade, and followed that business until engaging in the present line. He has the management of the factory at Wheeling, and thoroughly understands the business. The "Industries of Pittsburgh" spreads to the world information of many fine establishments that are known to but a few even of its citizens. The firm of Dobbs & Risinger is composed of gentlemen of high character and ability.

H. CARTER,—*Sewing Machine Bazar, Corner Fifth Ave. and Market St.*

At his "Bazar" all the leading Sewing Machines in use are sold, bought and exchanged, and a variety of all makes of machines and attachments are to be found in stock, including manufacturing as well as family machines. It is not an agency confined to one machine, but a general Sewing Machine Bazar, where all kinds can be compared and tested, and exchanges made. A repair department is also attached. In addition to the sewing machines all sorts of appliances, attachments and requisites for machines are kept, such as hemmers, fellers, bladders, needles, oil, thread, etc. Machines are sold on weekly and monthly payments, as well as for cash, and a good assortment always on hand to select from. Mr. Carter was born in England, in 1847, and has been in Pittsburgh 17 years. His present business has been established some two years, previous to which he was business manager for different sewing machine companies, and has an experience in the sewing machine business of 14 years in this city.

WM. COOPER & CO.—*Wholesale Grocers, 215 Liberty St.*

The business was founded in 1837, under the firm name of Cooper & Young, who continued as partners till 1846. Mr. Young withdrew, succeeded by Wm. Cooper, Esq., (the present senior partner,) who, with his brother James, under the title of Cooper & Bro., conducted the business till 1849, when William went to California, where he engaged in mercantile occupations for three years. Returning about 1852 he again entered the firm, which became known from that time as Wm. Cooper & Co. In 1857, through the death of James Cooper, A. S. Getty and John Cooper were admitted, no change, however, being made in its style. John Cooper dying in 1876, the surviving partners continued the business. William Cooper, Esq., was born in Ireland, and came to this country when quite young. His experience in business affairs is remarkably comprehensive. Mr. Getty is a native of Pennsylvania. He has been honorably connected with many public enterprises. This business occupies a large three story building, 20x90 feet, with ample cellars, all of which is engrossed by the firm, whose regular trade will average \$150,000 per annum. The specialties of this house are Wholesale Groceries, dealing largely in Fish and Feathers.

ADAM RODRIAN,—*Boots and Shoes, 119 Rebecca St., Allegheny.*

As a manufacturer of fine Boots and Shoes, Mr. Rodrian has established an enviable reputation and enjoys the patronage of many of the leading families of Allegheny City. As he devotes his attention almost exclusively to custom work, his stock on hand is not necessarily very large, but does a good annual business, and steadily increasing. He employs experienced workmen, besides giving his personal attention to the business. His particular specialty is fine Custom Work and Repairing, and no job is allowed to leave his shop or store unless it is thoroughly and carefully finished in the best and most workmanlike manner. Mr. Rodrian is a native of Germany, but has long resided in the country, and his establishment, at No. 119 Rebecca St., Allegheny, is well and favorably known.

ST. JAMES HOTEL,—*Liberty St., opp. Union Depot; J. K. Lanahan, Proprietor.*

Conducted both on the American and European plan, this favorite Hotel is an institution so well known and appreciated in Pittsburgh as to demand consideration in a work seeking to properly display in detail the resources of the city. The St. James is a monument to the enterprise and public spirit of its projector and proprietor, Mr. James K. Lanahan, by whom it was built, furnished and formally opened in 1867, and since that period has been universally regarded not only as the most pleasant and convenient resort for all classes of the traveling public, but as one of the most home-like and comfortable public houses in Pittsburgh. Being conducted on the foreign as well as American plan, the choice of either is at the option of every guest, and the St. James is the only hotel in the city that affords these facilities. Located immediately opposite the Union Depot, on Liberty St., the site is most advantageous for travelers and others; and the general accommodations, attendance, furnishing, ventilation, bar and menu are all that can be desired, the charges at the same time being extremely moderate. The dimensions of the premises are 60x100 feet—the edifice being four stories in height and supplied with every facility for escape in case of fire or other accidents; all of which, however, are carefully provided against. Mr. Lanahan is one of the most widely known and esteemed citizens of this community. Originally from Ireland, he came to this country in 1845, and for nearly a third of a century has been closely identified with Pittsburgh in the development of her various commercial and productive interests, and as a member of city councils has invariably exerted an active influence for good upon the legislative government of the city and its public measures and improvements. As proprietor of the St. James, he is a considerate and genial host, never neglecting the well-being of his guests, and always promoting their ease and enjoyment, retaining their esteem, to which he is richly entitled.

SUYDAM, LAWRENCE & CO.—*Pittsburgh White Lead and Oil Works, Office, 450 Rebecca St., Allegheny.*

As an interest of great importance to the industrial thrift of the community, the manufacture of White Lead has long held a prominent place. Of those largely engaged in this branch of manufacture, the house of Suydam, Lawrence & Co., who are the present successors to the oldest White Lead works in this section of country, established as it was in 1832, are entitled to particular mention, not alone from the extent of their operations in this direction, but also on account of their conjoining, with the corroding of lead, the manufacture of Linseed Oil. This department of the business had been carried on successfully for a series of years by Mr. M. B. Suydam, before the existence of the present firm (which was established in 1877), united both industries under one management, the advantages of which to those familiar with either branch of trade are obvious. The plant of the firm is situated on Rebecca St., in Allegheny City, and consists of two large three-story brick buildings, one of which is devoted to the manufacture of Lead, the other to the production of Linseed Oil. The former, in its machinery and general appointments and apparatus, is perhaps one of the most complete establishments of the kind in the United States, and in all its departments, from the corroding beds to the packing room, in vats, mills and pumps, is about as perfect as ingenuity and capital can make it. In White and Red Lead Colors and Putty the product is a large one. The capacity for manufacturing White Lead alone is 1,000 tons annually, while 200,000 gallons of Linseed Oil are expressed yearly in the building devoted to this purpose. Three powerful steam engines are required to operate the machinery of the works, and 30 men are constantly employed in the various departments. The goods prepared by this firm are marked and highly esteemed for their purity and excellence of color; they find a ready market through Pennsylvania, Ohio, Michigan, Indiana and New York—the demand increasing at a very satisfactory ratio. As a firm, Messrs. Suydam, Lawrence & Co. stand among the most prominent of their cotemporaries, and are heartily commended in every respect as being honorable and reliable people with whom to establish the most gratifying relations.

M. FIRE & BRO.—*Dry Goods, Trimmings, &c., 100 & 102 Federal St., Allegheny.*

One of the leading houses engaged in the Dry Goods and Trimming business, in the two cities, is that of M. Fire & Bro., whose warehouses are located at Nos. 100 and 102 Federal St., Allegheny. They occupy the double three-story building at the numbers given above, with a frontage of 35 feet on Federal St., and extending back 60 feet. Each floor is filled with an admirably selected assortment of Dry Goods, Trimmings, &c., selected expressly for this market by one of the most judicious buyers in the city, and is estimated at not less than \$30,000 to \$40,000. They transact a wholesale and retail business, their trade being principally in the two cities and within a radius of 50 miles; their annual sales reaching \$50,000. Within the past few months the increase in their business has compelled them to enlarge their quarters, and they have now greater facilities than ever for the display of their fine stock and for waiting upon their customers. The members of the firm are Mathias and Charles Fire, both of whom are natives of Germany, but for more than a score of years residents of Allegheny City and identified with the Dry Goods trade, in which they now rank among the leading houses.

THE SINGER MFG. CO.—*Sewing Machines, No. 10 6th St.*

For nearly a third of a century the branch office of the Singer Manufacturing Company has been established in Pittsburgh, during which period it has been so intimately connected with every interest of the community, and so promotive of the general benefit as to demand special mention in this work. It is perhaps safe to assert that no Sewing Machine ever attained such a popularity, or deserved its phenomenal success more richly than the Singer Sewing Machine. The local branch of this company has always been regarded as an important one, not only from the extent of the community immediately surrounding it, but from the large district it controls, having established sub-agencies throughout West Pennsylvania and contiguous States, embracing such points as Wheeling, Parkersburg, Keyser, Grafton, Huntington, Charleston, Lewisburg in West Virginia, and Johnstown, Greensburg, Indiana, Uniontown, Butler, McKeesport, St. Petersburg, New Brighton, Washington, Allegheny City, Brookville, Clearfield, and the South Side and East End of this city in West Pennsylvania, Marietta, Steubenville, and Gallipolis in Ohio, requiring in all the services of over three hundred men to transact the business, which amounted in 1873 to over \$300,000. Their enormous returns, it should be remembered, are, in spite of the fact that the expiration of the Singer patents has led to the competition of numerous upstarts, who endeavor (in vain, however, it seems) to divert the public from its appreciation of the exquisite workmanship, durability and finish that has always characterized the products of the Singer manufactory, and it is therefore highly gratifying to observe that the business of the concern is rapidly on the increase, exhibiting an active vitality, resulting as much from the intrinsic merits of the machine as the ability displayed in managing so vast a trade. Mr. R. W. Steadman has for many years represented the company at this point. He is distinguished for his thorough comprehension of all the details of the business, and other valuable characteristics, which have no small influence in conducing to the prosperity of the concern which he represents.

J. H. TRUXELL,—*Tin Type Rooms, Cor. 5th Ave. and Market St.*

The entire third story of the large building, 16x100, at the corner of Market St. and 5th Ave., has been occupied as a Photograph or tin type gallery for the past twenty-five years under various proprietors, one of the last owners being the late Mr. W. W. Charles, one of Pittsburgh's most accomplished and gifted artists. The rooms were fitted up exclusively for this business with all the latest and most modern appliances and conveniences, and are admirably lighted and arranged. In Sept., 1877, Mr. Truxell became owner and proprietor, and under the name of the Boston Tin Type Rooms has built up a large and flourishing business, making tin types a specialty, for which style of pictures he has acquired an enviable reputation in the two cities and surrounding towns. His pictures are true to life, and in an artistic point of view superior to many of the photographs taken by other houses, and much cheaper and more satisfactory. Mr. Truxell was born in West Virginia, in 1832, and learned his trade in Wheeling some ten years ago, since which time he has given his exclusive attention to the business. Persons desiring fine pictures at moderate prices should give him a call.

BOYD BROS.—*Fine Confections, No. 27 Federal St., Allegheny.*

The Confectionery and Bakery of Boyd Bros., located at No. 27 Federal St., Allegheny, near the Suspension Bridge, was established in November, 1878, by Messrs. W. W. and J. D. Boyd, and the regular increase in their business since that time is evidence of the popularity of the articles manufactured and sold by them. They occupy the spacious store room, 22x120 feet, in the four story brick structure at the location named, employing five assistants, and carrying a stock of about \$3000 in value, embracing every variety of choice confections of their own manufacture, and Foreign Fruits, Nuts, &c. Both members of the firm are natives of Allegheny, and well and favorably known in the city of their birth, and throughout the surrounding towns. Their location is admirably adapted for the line of business in which they are engaged, being central and on the main thoroughfare connecting the two cities, and near the Allegheny depots. Their stock is always fresh and desirable, and their prices corresponding to the times.

E. B. MERCER,—*Teas & Groceries, No. 80 Federal Street, Allegheny.*

This old and reliable Grocery House was established in 1842 by Mercer and Robinson, who were succeeded by Mercer and Son, under which style the business was conducted until 1878, when Mr. E. B. Mercer became sole owner and proprietor. He occupies the spacious three-story brick warehouse, 23x80, at No. 80 Federal St., directly opposite the Pittsburgh, Fort Wayne and Chicago R. R. Depot. Carrying an extensive stock of fine Teas, Choice Family Groceries, Pure Spices, Sugars, Coffees, Roasted and Green, Canned Goods, Salt, Nails, White Wine and Cider Vinegar, and all articles usually found in a first class metropolitan establishment of this description. Fish in great variety is the particular specialty for which this house is noted. Mr. Mercer's stock is valued at from \$4,000 to \$5,000, and his annual sales reach \$21,000, which are principally to parties in Allegheny, Beaver and Butler counties. He has a large and flourishing trade, along the lines of Pittsburgh, Fort Wayne and Chicago, and the West Pennsylvania R. R. Mr. Mercer is a native and life-long resident of Allegheny City, where he was born in 1852, and is the worthy representative of a family name, which has for nearly forty years been identified with the Grocery trade of Allegheny county.

L. H. SMITH,—*Brooms, Brushes and Grocers' Sundries, 41 Wood St.*

People not thoroughly familiar with the business avenues of Pittsburgh often surmise that we have here one grand workshop of Iron and Steel productions, overlooking entirely the less extensive, but equally important manufactures of commercial requisites, and imagine that the branches of trade usual to other cities are here neglected. One stroll through our busy thoroughfares will dispel the latter idea, and a stop at L. H. Smith's manufactory and store room will prove that in the line of Brooms and Brushes our city can compete with the best Eastern and other Western houses, both as to quality, style, finish and price. Established in 1874, as L. H. Smith & Co., Mr. Smith became sole proprietor after a short duration of co-partnership, and has conducted the business with such success as to reach, in sales of Brooms, Brushes, Paper, Paper Sacks, Wooden Ware, Staple Groceries and Grocers' Sundries, an aggregation of \$85,000 annually, with an increasing trade through Western Pennsylvania, Ohio and West Virginia, and other more remote sections, employing, in various capacities, 24 hands at the factory, store and upon the road. A native of this State, born in 1847, Mr. L. H. Smith has been, since the attainment of his twentieth year, a citizen of Pittsburgh, and interested in mercantile industries, in which he has shown a marked proficiency, a strict integrity, and acquired a well deserved trade and reputation.

AGNEW & CO.—*Flint Glass, Vials & Bottles, Office, 153 1st Ave. Works, South Side.*

Among the industries for which Pittsburgh is particularly noted, the manufacture of Glass occupies the second position only in importance and as a source of commercial and industrial thrift. Occupying no inconspicuous place among its cotemporaries, the house of Agnew & Co. are well deserving of special mention in a work designed to disclose in detail the resources and advantages of this city, as a producing and mercantile center. The plant of the firm is located on the South Side of the Monongahela River, and consists in part of one main building, 40x60 feet, and numerous smaller structures, covering in all an area of about one-third of an acre. The furnace is built upon an improved plan. It contains six large double mouth patent pots, and in capacity may be classed with an ordinary 8 pot furnace. Here 55 operatives are engaged, for 10 months, in the manufacturing of every variety of Flint Glass, Vials, and Bottles, of staple sizes or to order, the product of this concern being remarkable for its perfection, enjoying a reputation for excellence over the entire United States. For the item of labor alone a weekly disbursement is necessary of \$425. The average annual sales of the house are at present about \$40,000, and rapidly increasing. Mr. John Agnew, who supervises the operative part of the business, is regarded as a pioneer in the Glass trade of Pittsburgh, and is perhaps the oldest practical Glass manufacturer in this community, having completed his apprenticeship to Wm. McCully in 1837, and ever since that period been intimately concerned in promoting the advancement and prosperity of this industry. The trade of the house extends over various States besides our own, including Illinois, Indiana, Iowa, Louisiana, Maryland, Missouri, California, New York, Ohio, Oregon, Tennessee, Texas, West Virginia, Wisconsin, Michigan and the Canadas. Though there may be larger firms in the business than that of Agnew & Co., none produce better goods, occupy a higher position, or are more reliable and deservedly popular.

JOHN M. IRWIN & SON,—*Manufacturers of Furniture, 97 Smithfield St.*

This is one of the old reliable business houses of Pittsburgh, having been established in 1842, as John M. Irwin & Co., under which style it continued until 1877, when it became as above. They are extensive dealers in Furniture of every description, and manufacture most of the Furniture themselves. Their factory is located at Nos. 13, 15 and 17 Old Avenue, and is 30x120, four stories high. Here they employ 38 experienced workmen, and their weekly pay-roll amounts to about \$400. Their sales-rooms are located at No. 97 Smithfield St. (Howard Block), and are 20x60 feet on the first floor, and 40x60 on the second, third and fourth. In addition to the business carried on here, they manufacture largely for the retail trade. They carry an average stock of about \$35,000, and their sales are correspondingly large. Mr. John M. Irwin was born in Pittsburgh in 1816, and is a life-long resident of the city. He is one of the oldest business men in the city. Mr. James S. Irwin, his son and partner, is a native of Pittsburgh, and was born in 1847.

GRAHAM & COURTNEY,—*Salt M'f'rs, 254 & 256 Beaver Av., Allegheny.*

Adding materially to the industrial thrift of the community, and by actual production increasing the wealth and resources of the city, the firm of Graham & Courtney should receive more than passing mention in a publication displaying in a detailed way the advantages, facilities and possibilities of Pittsburgh and its environs. More than 20 years ago the present plant of the firm was established by Mr. M. B. Ross, who began in a very small way, the business being suggested by the accidental discovery of an inexhaustible salt well on the premises. In 1867 Messrs. Graham & Courtney succeeded to the concern, and at once began a series of improvements, and the application of new methods, that placed the works upon a par with any of a similar character in the country. As now enlarged, the establishment consists of one large brick and frame two-story building, located on the corner of Beaver Ave. and Juniata St., covering an area of half an acre, and devoted entirely to the manufacture of Salt, the warehouse being at the corner of Market and Juniata Sts., a one-story building, 48x1000 feet, where a stock is usually carried of from \$8,000 to \$10,000. The appliances and machinery of the works proper consist partly in one engine, 12 horse power, and one boiler, 8½ feet wide by 100 feet long, and 4 feet deep, requiring, to operate, 400 bushels of coal per diem. There are, besides, 5 large evaporating tanks, 9 feet wide by from 20 inches to 4 feet deep, traversed from end to end by copper steam-pipes. Ten employees are engaged in the works besides the proprietors, making a disbursement necessary of about \$6,000 annually. The character of the product for purity and whiteness finds it a ready market in Pennsylvania and adjoining States, the sales amounting to \$25,000 per annum, and increasing. Both partners actively participate in business. Mr. James Graham is originally from Ireland, coming to this city with his parents at a very early age. Mr. J. M. Courtney is a native of this country, in the government of which he has held several official positions. As a firm, identified with and promoting the best interests of the city, the house of Graham & Courtney are regarded with the highest esteem as indispensable members of the producing community.

JOSEPH HORNE & CO.—Dry Goods, Notions, Straw Goods & Millinery.*No. 77 & 79 Market St. & 197, 199 & 201 Penn Ave.*

In recording any adequate account of the industries of Pittsburgh, and the progress made during the last quarter of a century in commercial and manufacturing importance, it would be impossible to omit mention of the house of Joseph Horne and Co. Established by the present Senior partner in 1848, the resources and trade of this concern have more than kept equal pace with the general prosperity of the Iron City. Founded with but a limited capital, but conducted with every advantage to be derived from a stainless business policy, the success of the house increased with each succeeding year, until at the present time it stands at the head of all similar establishments in Western Pennsylvania. With the rapid enlargement of its operations, it became necessary to add to the executive force of the house, and with this end at various times, some of those who were most prominently connected with its prosperity, were admitted to the firm, which assumed the above title, and the business was divided into two distinct departments, occupying separate buildings, each with its special purpose. The wholesale house remained at the old location, No. 77 and 79 Market St., appropriating the entire original premises, three stories 32x120, and a purposely constructed annex. The firm in this division are Jos. Horne, C. B. Shea, J. F. Johnson and A. P. Burchfield, all of whom exercise an active personal supervision of affairs. The retail department was removed to Nos. 197, 199 and 201 Penn Ave., upon the completion of Young Men's Mercantile Library building. The premises here occupied embrace 3 stores, with a frontage of 60 feet on Penn Ave., 180 feet in depth. It is one of the most complete and spacious edifices in the city, securing the bulk of the first floor, arranging and fitting it in such way, as to make it the most sumptuous sales room in the city. This department is under the special control and supervision of Mr. Joseph Horne, aided by competent and experienced assistants. Doing a business that has reached an average of \$1,500,000 annually, with a staff of 140 employees, this house affords facilities for buyers unequalled in the West, both from the advantages derived from its great resources, and its enterprise in importing and enlarged connections. Conducting in so high a degree to the substantial benefit of the community, and identified so closely with the growth and commercial well being of this city, the house of J. Horne & Co. occupies a place in the general consideration, that redounds no little to the establishment of a reputation for Pittsburgh in keeping with its real merits.

DR. JAMES ORR,—Dentist, No. 77 Smithfield St.

The dental parlors of Dr. Orr, at No. 77 Smithfield street, are centrally and desirably located and are fitted up in an elegant and attractive manner. Dr. Orr commenced his studies with Dr. S. P. Hullihen of Wheeling, West Virginia, in 1852, and practiced in that city from 1857 to 1861, when he removed to this city and opened an office. He has been eminently successful here and enjoys a large and lucrative practice. He is a thoroughly competent and skillful operator, and devotes his attention exclusively to the profession in which he is engaged. He has the finest and most complete variety of instruments and apparatus for carrying on the business in all its departments, and in the manufacture of artificial teeth he has no superior in this country. In the use of anesthetics Dr. Orr is proficient, and has met with unvarying success in all cases where he has administered them. As an evidence of the estimation in which he is held by his brother professionals it may be stated, that Dr. Orr held the position of President of the Pittsburgh Dental Association from 1861 to 1862. In every description of fine work pertaining to Dental Surgery he particularly excels, having for many years made it his special study. His reputation is not confined to the limits of the two cities, as his practice extends through the adjoining counties, and even into Ohio and Western Virginia. Dr. Orr is a native of Washington Co., Pennsylvania, and was born in 1823. He has resided in Pittsburgh since 1861.

KIRKPATRICK, BEALE & CO.—Sheet Iron and Terne Plate,*Office, 143 1st Ave.**Works, Leechburg, Pa.*

Among those industries that it becomes the special province of this work to display, the firm of Messrs. Kirkpatrick, Beale & Co. occupy no inconspicuous position, and from the character and magnitude of their operations are entitled to more than brief mention. Connected in 1868 with the Siberian Iron Works, carried on by Messrs. Rogers & Burchfield, they succeeded the latter firm in 1877, and have since continued to prosecute the business with resolution and signal success, the sales averaging \$215,000 annually. The plant of the firm is located at Leechburg, Pa., a short distance from this city, and consists of numerous buildings, all admirably adapted, and built especially for the purposes to which they are applied; covering an area of over six acres, and containing, together with other improved machinery, two trains of Rolls, five Puddling Furnaces, six Noolling Fires, several engines with an aggregate power of 200 horses, producing the finest brands of Sheet Iron and Terne Plate of all grades. The general office and ware rooms are located at No. 143 1st Avenue. The dimensions of these premises are 25x90 feet, and three stories high. Their trade, which is all ordered work, consists mainly of Shovel Iron, Lock Iron, Tea Tray Iron, Trunk Iron, Stove Body Iron, Stamping Iron, all grades, Cold Rolled Iron, all grades, special sizes being made or cut to order, and Terne Plate. For these specialties the firm have acquired a reputation that is unsurpassed, and justly arises from the excellent character of these products.—Mr. Kirkpatrick and Mr. Beale are both natives of Pennsylvania, and have always been identified with the industrial interests of the community, as promoted through the Iron trade. Mr. J. C. Wallace, the Company, is originally from Ireland, but has been closely connected with the manufacturing development of our resources for nearly thirty years. No firm occupies a higher or more enviable position than Messrs. Kirkpatrick, Beale & Co., and none can more easily maintain and perpetuate the esteem in which they are held by their cotemporaries and the public at large.

W. H. HAMILTON & CO.—Glass Manufacturers, Office, No. 26 Wood St.

Identified with one of those great special industries, for which Pittsburgh has established a wide celebrity, the house of W. H. Hamilton & Co. is one of the widest and most favorably known houses in Pittsburgh in this line of business. Founded in 1863 by the same firm, composed of W. H., J. T. & J. S. Hamilton, to each of whom was ascribed a different department in the work, the house has become favorably known, and with an annually increasing trade has fixed itself firmly among its cotemporaries with enlarged facilities, not only ample, but perhaps unexcelled. The warehouse and counting rooms occupied by the firm, are at No. 26 Wood St., the whole of one large building being used for these purposes. The factories are located on 20th & 21st & Railroad Sts., and consist of five buildings, covering an area of about one acre, thoroughly adapted by prolonged experience and constant improvement to the business. Here are employed one hundred and seventy-five men and boys, skilled in the special manufactures of this concern, requiring a disbursement to this source alone of \$84,000 per annum. Every appliance in the way of steam power and labor-saving apparatus is brought into application, to secure the rapid execution and perfect finish of the product, which consists exclusively of every grade, kind and description of Flint Glass, Vials and Bottles. Particular attention being directed to the manufacture of druggist's prescription ware, for the excellence of which the firm have attained a very wide celebrity in the trade. With an extended influence, always exerted in behalf of the industries of Pittsburgh, and continuously directed in aid of every movement that will conduce more greatly to that end, the house of W. H. Hamilton & Co. occupy a position that is equally honorable to itself and the community from which it originated.

PERRY M. GLEIM,—*Druggist, &c., Rebecca St. & Allegheny Ave., Allegheny.*

The neat and attractive Pharmacy at the corner of Rebecca St. and Allegheny Ave. was established in 1873 by Mr. Gleim, the present proprietor, with a moderate capital, which, during the past six years, has considerably increased. His store, which is located in a two-story frame building, 18x45, is stocked with a full and complete line of Drugs and Medicines of the purest and best quality, Perfumeries, Brushes, Soaps, Toilet Articles and Fancy Goods, valued at about \$2,500. Mr. Gleim, being a graduate of the Philadelphia College of Pharmacy, and having had 12 years' practical experience in the Drug business, makes a specialty of preparing and compounding physicians' prescriptions in an accurate and careful manner, having in his employ competent assistance, and enjoys the confidence of the leading physicians in the city. His trade is of a local character, and will compare favorably with that of any similar establishment in the two cities. Mr. Gleim was born in Harrisburg, Pa., in 1851, but has resided in Allegheny for a number of years.

LEVIS & BICKEL,—*Solicitors of Patents, 131 Fifth Avenue.*

These gentlemen have both had considerable experience and extended practice as Counselors at Patent Law and Solicitors of Patents, although their present partnership and association dates back only to 1878. They occupy offices at No. 131 Fifth Ave., a few doors above Smithfield St., and their business extends throughout Pennsylvania, Ohio, and many of the other States, thus enabling them to successfully prosecute all claims and secure information directly from headquarters. They attend carefully to all business before the Patent Office and Patent causes in the courts, prosecute all classes of Government claims, &c., and furnish applicants with all information relative to procuring Patents, the *modus operandi*, &c., &c. Both gentlemen are highly recommended, and enjoy the confidence and respect of all with whom they have had occasion to transact business. Mr. O. D. Levis was born in Zellenople, Butler County, Pennsylvania, in 1835, and came to Pittsburgh in 1857. Mr. C. K. Bickel was born in Columbus, Ohio, in 1853, and located in Pittsburgh in 1875.

C. WATTLEY & CO.—*Embroideries, Laces, &c., 109 Federal St., Allegheny.*

The elegant and extensive establishment of C. Wattley & Co., located at 109 Federal St., Allegheny City, is the recognized headquarters for the latest, most fashionable and novel designs in fine Embroideries, Laces, Trimmings and Furnishing Goods. This house was established in 1867 by the present proprietors. Their stock is now full and complete, comprising every variety of fine Embroideries, Laces, Trimmings, and Ladies' and Gents' Furnishing Goods of foreign and domestic manufacture. They occupy a spacious three-story brick structure, 23½x110 feet. Their trade is located in the city and neighboring towns, and is increasing so rapidly that the firm have been compelled to seek more commodious quarters, and have now in process of construction a new and elegant business house at No. 109 Federal St., which will be ready for occupancy about October 1, 1879. The firm of C. Wattley & Co. consists of Chas. Wattley and Jno. Thompson; the latter is of the firm of Thompson & Lyons, linseed oil manufacturers.

KELLY & JONES,—*Steam Warming and Ventilating Apparatus, 141 First Ave.*

This house, which was established in 1875, succeeded the Angell and Blake manufacturing company of New York City in this section. They occupy four floors, each 25x80, at No. 141 First Avenue, carrying a stock of from \$5,000 to \$10,000 exclusive of machinery, and transacting an annual business of from \$80,000 to \$100,000, which extends all over the country, and is principally connected with public works and with the trade everywhere. They manufacture Steam Warming and Ventilating Apparatus for either low or high pressure laundry machinery, steam pumps, steam boiling kettles, boilers for power etc., employing from fifteen to twenty hands with a weekly pay roll amounting to about \$200. They have now before the Patent office two new inventions in Radiators and Heating Boilers, upon which they will obtain patents, in addition to two others already secured by letters patent. They are making improvements all the time, many of which are of a very important character. Their specialty in manufacturing is in Steam Heating Apparatus, which they supply largely to public buildings, and to the trade all over the United States and Canada. Mr. J. T. Kelly was born in Allegheny City in 1850, and was engaged in business in Youngstown, Ohio, for four years previous to coming here. Mr. George M. Jones was born in Lancaster, Pa., in 1851, but has resided in Pittsburgh since 1872. He received his business education in New York City, where he became familiar with the Steam Heating business. The capital invested by this firm is \$15,000.

J. SMITH & SON,—*Steam Dyers and Scourers, 52 Fourth Ave.*

The Steam Dying and Scouring establishment of J. Smith and Son was started in 1865 in a comparatively small way, but by strict attention to business, and the excellence of their work, their trade has steadily increased until they now occupy the three-story brick building, 24x29, at No. 52 Fourth Ave., and do a business that will compare favorably with that of any similar house in the city. They have one large steam boiler, and the work is attended to by Mr. Smith and his four sons, who are all practical and experienced workmen in their line. They have added a branch house, located at No. 1511 Carson Street, South Side, under the charge of Joseph Smith, one of the Sons referred to above. This branch of the establishment is in operation since April 1879, but was previously conducted by Henry Helman since 1867 under Joseph's supervision. This house is doing a satisfactory business. To the residents of South Side we can cordially recommend this establishment. They will find Dyeing and Scouring of all kinds for ladies and gentlemen done with promptness, and in the most satisfactory manner. Mr. Smith, Sr., was born in England in 1817, and learned his trade there; H. W. and Joseph, his two eldest sons, were also born in England. Samuel and Chas. are both natives of Allegheny City. The firm does every description of Dyeing and Scouring, making a specialty of Dyeing and Cleaning red gloves and plumes.

L. T. M'GRATH,—*Grocer, 1918 Carson St., Pittsburgh, S. S.*

This well-known gentleman occupies the premises above mentioned; it was previously conducted as a grocery by Chas. Hook, who was succeeded by Peter Schlegel. He, in turn, was succeeded by Mr. M'Grath, the present owner. Like a great majority of business men, he commenced with very limited capital. By close attention to business he has greatly enlarged and extended the moderate trade of Mr. Schlegel. Mr. M'Grath's present stock of Groceries is worth at least \$2,000, and his annual sales do not fall short of \$11,000. His very convenient and well arranged store is a three-story brick, 20 feet front and 38 feet deep. An active lad assists M'Grath in his store, and the amount of business done is such as to afford them little idleness. The trade is chiefly local, and keeps pace with the improvement in the times. Mr. M'Grath was born in Ohio, in 1843 but has resided since infancy in this city, and is a highly respected citizen.

JOHN WILSON & SON,—Wholesale Grocers, No. 297 Liberty St.

The statement has frequently been made that in her devotion to manufactures Pittsburgh has neglected her mercantile or commercial opportunities. Whether this is true of other branches of trade or not, the remark is certainly not applicable to her Wholesale Grocery establishments, as may be seen by reference to the notices of her leading representative houses, and the statistics furnished relative to their importance and extensive trade in other portions of this work. Possessing almost unexampled facilities in her geographical position and modes of transportation, as well as in the enterprise and high standing of her leading merchants in this line, Pittsburgh can to-day furnish the staple articles of Groceries at prices which will compete successfully with Eastern dealers, and effect a great saving in freight to retailers throughout Western Pennsylvania, Eastern Ohio, West Virginia and the towns and cities along the banks of the Ohio River, and on the lines of the various Railroads centering here. Prominent among the houses engaged in the Wholesale Grocery trade may appropriately be mentioned that of John Wilson & Son, whose ware-rooms are located in the spacious and elegant four-story iron front building, 22x110, at No. 297 Liberty Street. This house was founded about thirty-three years ago by Mr. John Wilson, the present senior member of the firm, and Mr. John Watt, under whose management and administration the business was successfully conducted until 1869, when the present firm was established with Mr. George W. Wilson as junior partner. Their present quarters have been fitted up expressly for the convenience of the firm, and are supplied with an engine and boiler for hoisting purposes, and for heating the building during the winter season. They employ seven or eight assistants at a weekly expense of about \$100, and carry a full and complete line of choice groceries, comprising every article pertaining to this line, averaging in value about \$60,000. Their trade is principally in Middle and Western Pennsylvania and Eastern Ohio, and their annual sales will reach \$300,000. This house has never employed traveling salesmen, and is opposed to this system of drumming up business. They depend solely on the well established reputation of their house for public patronage. It is undoubtedly the only safe and legitimate method of transacting business.—Mr. John Wilson is a native of Ireland, but he has resided in Pittsburgh since 1842, and during all that time been actively engaged in business and identified with the Wholesale Grocery trade of the Smoky City. Mr. George W. Wilson was born in Pittsburgh in 1846, and is a thorough, practical and wide awake business man.

MITCHELL & CO.—Stove Manufacturers, 14th and Etna Sts.

No city in the Union has achieved such a deservedly wide-spread reputation as an industrial center as Pittsburgh. It stands to-day the foremost manufacturing city in the Union, and Iron in its manifold forms and varieties of manufacture is the principal and prime factor of her immense wealth and importance. The house of Mitchell & Co., manufacturers of every description of Stoves and Ranges, is the oldest establishment in the city engaged in that line of business with one solitary exception, and that house antedates it only one year. It was founded in 1828 by Thomas Mitchell, Thomas Sweeney and Mr. Campbell. After various changes in the firm name and style, it became Mitchell, Stephenson & Co., and by them the business was successfully conducted until 1878, when it became as at present, Mitchell & Co. Fifty years ago, when originally started, the business was conducted in a small way, but, owing to the superior quality of articles manufactured by this house, it steadily increased, until, at one time, it reached as high as \$150,000 per annum. Owing to the decrease in price of manufactured articles and the general depression of business in all branches, the present trade will hardly reach that amount, although it is one of the largest and best known houses in the city. Their warehouse and foundry buildings are located on the corner of Fourteenth and Etna Sts., and comprise one four-story brick structure with a frontage of 204 feet 6 inches on Etna St., with a depth of 30 feet, and a one-story brick foundry building, 175x100. The works have a capacity of 1,500 tons of finished work, and will compare favorably for size, capacity and general completeness of appointments, with any in the Western States. One 55-horse power engine furnishes the motive power for their extensive machinery, and 70 hands are constantly employed, with a monthly pay-roll averaging about \$3,500. They manufacture every variety of Stoves and Grates of the latest designs and most elaborate patterns, and their goods are noted for superiority of material and finish. Mr. Mitchell is a native of Pittsburgh, and has for many years been identified with her iron interests and manufactories.

J. B. JONES & BRO.—Wholesale Iron, Metal & Steel, 73 & 74 River Ave., Allegheny.

The iron interests of Pittsburgh are of course the most prominent and best known of all others. Among the foremost dealers in manufactured Iron, Metals, etc., is the firm of J. B. Jones & Bro., which was inaugurated in 1872 by J. B. Jones alone, and in 1874 assumed its present name by the admission of James Jones. This firm keep in stock an assortment of Metals, including Copper, Brass, Lead and Zinc, valued at \$2,500, and transact a business of \$35,000 to \$50,000 annually. Their establishment, including the metal yard, is 80 by 100 feet, and the power for the scrap mill is furnished by an engine and boiler of approved make; from 6 to 7 men being employed, running daily three pair of shears, cutting from a rail down to sheet iron. They make a specialty of cut No. 1 Scrap for crucibles for steel works. Both partners are native Alleghenians, J. B. Jones having been born in 1847, and James in 1853; and this fact, taken in connection with their prices being always put down to the lowest possible figure, has secured them a reputation and trade extending not only throughout this, but all the adjoining counties and Eastern Ohio.

MAX SCHNEIDER,—Dyeing, Scouring and Refinishing Works, 253 Penn Ave.

This gentleman has been established in business at the above location for the past seven years, during which time his trade has largely increased, amounting to between \$3,000 and \$4,000 per annum. Mr. Schneider occupies a brick building, 16x95, has one boiler, and employs three hands. He makes a specialty of Cleaning Lace Curtains and Blankets in a superior and highly satisfactory manner; also Cleans and Dyes all kinds of Fabrics for ladies' and gentlemen's wear. He makes a specialty of Dyeing and Cleaning Kid Gloves and Feathers, attending to all orders promptly. Mr. Schneider's trade is located in the city and surrounding country. He is a practical Dyer, having followed the business for 11 years, and understands all its details thoroughly, and never fails to give complete satisfaction.

JOHN FROEHLICH,—Wines and Liquors, No. 464 Penn Ave.

Mr. Froehlich commenced business for himself in 1868 in a comparatively small way and with moderate means. Since that time his trade has steadily increased and his capital augmented to a considerable extent. Between three and four years ago he erected the elegant brick building (three stories, with Mansard roof) which he now occupies. It has a frontage of 16½ feet on Penn St., extending back 100 feet, and is one of the finest and most imposing structures on the avenue. Mr. Froehlich carries a full line of choice foreign and domestic Wines, Brandies, Gins, &c., making a specialty of pure old Monongahela Rye Whiskies of superior quality and perfect purity. His average stock will amount in value to about \$5,000, and his annual sales will exceed \$15,000. He has established an enviable reputation for keeping only the purest and best articles, free from adulterations, and his trade is steadily increasing throughout the city and adjoining towns. Mr. Froehlich was born in Germany, but has resided in Pittsburgh since 1855, where he has accumulated a handsome property and built up a flourishing and lucrative business.

J. HENDERSON & BROS.—Wholesale Druggists, No. 50 7th Ave.

One of the most prominent firms engaged in the Wholesale Drug trade in this city is that of J. Henderson & Bros., which, established in 1841 by W. Henderson, Esq., has always maintained a high position, acquiring from year to year a larger trade, and more available facilities. In 1859, at the retirement of its founder, the present firm assumed control of the business, which has been conducted in a manner so entirely successful that the average sales are now about \$100,000 annually, employing the labors of ten assistants, under the active supervision of J. and A. C. Henderson, the respective members of the firm. The premises occupied and owned by the house are located as above, and consist of one substantial brick edifice, having five floors, 24x90 feet, all of which is required in the transaction of the business, a large proportion of which is in the manufacture and sale of proprietary remedies, owned exclusively, and prepared by this firm—Henderson's Carminative, Cough Syrup, Cottage Worm Candy, and Essence of Jamaica Ginger, all of which are widely celebrated as being among the most effective and efficacious medicines ever used. The Henderson brothers are both natives of Westmoreland Co., this State, and were born respectively in 1822 and 1826, coming to Pittsburgh at a very early age, and devoting themselves to the Drug business as a life occupation. The ample measure of success attendant upon the efforts of this house has been largely due to the enterprising, honorable and liberal policy that has always characterized its operations, and it is just to say, that no firm in this city has achieved a higher reputation for these qualities than that of Messrs. J. Henderson and Bros.

CHARLES A. SCOTT,—Book and Job Printer, 132 Fifth Avenue.

Not every person who has learned the trade is capable of "setting up" or designing a truly artistic specimen of job printing. To the mechanical portion of the business should be added the careful, critical eye of an artist, competent to "lay out" a job in a tasteful and elegant manner, and to execute it in such a style as to please the fancy and attract the attention. Among the many persons engaged in the Job Printing business in the Iron City, we believe there is no one who turns out more elegant and truly artistic work than Mr. Charles A. Scott, whose office is to be found in the Methodist Recorder Building, No. 132 Fifth Avenue. Mr. Scott was born in the city of Allegheny in 1851, and established himself in the Printing business in Pittsburgh in 1872, doing every description of fine Book and Job work, Newspaper work, &c., giving constant employment to eight hands, and at some seasons of the year requiring even additional force. Although the greater portion of his business is of a local character, he numbers customers in almost every State in the Union. A thorough practical printer himself, Mr. Scott employs only first-class workmen, and his business is steadily increasing from year to year. Mr. Scott is agent for Allegheny Co. for Cott's Improved Reversible Tablet Blotter, which has many advantages over any other now in use; first, because it allows the use of both sides of the blotting sheet, or its removal entirely and substitution of a new one; second, it prevents the hinge of the blotter from becoming limber when a part of the block of paper is used; third, the date lines of bill heads and statements are always covered by the blotter. These points make it the most handy and complete blotter on the market.

CREA, GRAHAM & CO.—Stoves, Ranges, &c., 316 Beaver Ave., Allegheny. *Warerooms, 262 Liberty St., Pittsburgh.*

The above named firm commenced business in 1877, under rather discouraging circumstances at first, their buildings being entirely destroyed by fire before they were completed. Nothing daunted, however, by their misfortunes, they immediately commenced to rebuild, and erected works even larger than originally contemplated. The grounds occupied by this firm have a frontage of 100 feet on Beaver Avenue, extending back 130 feet to an alley, on which are erected three conveniently arranged buildings, the first being 20x70, and used as the fitting and pattern department, the second, 18x25, as the Enamelling department, and the third, 50x60, as Foundry. Ten hands are employed in the various departments, at an average monthly expense of \$350. One twelve-horse power engine and one twenty-horse power boiler furnish the motive power for their machinery. This firm has recently opened a salesroom at No. 262 Liberty St., Pittsburgh, where a fine line of Stoves, Ranges, Grates, Fronts, Fenders, etc., are on exhibition, all of their own special designs and manufacture, reflecting great credit upon the young and enterprising house. Mr. John Crea and Mr. Wm. Graham are both natives of Ireland, and came to this country in their early youth. Mr. James E. Crea, who has charge of the books and office department, is a native of Allegheny City, where he has always resided.

JOHN KLINZING & CO.—Boots, Shoes and Gaiters, 1817 Carson St., S. S.

Mr. Klinzing succeeded G. Conley, and has not been long in the business. He has, however, every reason to continue it, and finds the demand for his work and his goods equal to his expectations. His present stock is worth \$2000, and this stock is constantly replenishing with work done in his own shop. Mr. Klinzing occupies a two-story brick building, with a front of 20 feet, and a depth of 60 feet. His prices are very reasonable, and his custom work, of which he has a considerable share, is of the best quality. Repairing is neatly and promptly done by Mr. Klinzing. His industry and attention to business will be certain to insure success. Mr. Klinzing was born in this city in 1857, and is well known and respected by his townsmen.

H. A. JONES,—Carpet Weaver, Fifth Ave. and Liberty St.

Mr. Jones commenced business in his present line, about 12 years ago, in a small way, doing all his own work. He now employs four hands and four looms, and turns out annually about 5,000 yards of Carpet. He occupies the basement floor at the corner of Fifth Ave. and Liberty St., 30x30 feet, and has also a factory in the 16th ward. He manufactures Carpets to order and carries a stock of List and Rag Carpets, of his own make, of a superior quality, which he offers at very low prices. Mr. Jones is a native of Scotland, and learned his trade in that country. He was one of the first men engaged in the oil business in this State, and to him much credit is due for the development of the oil regions of the present day.

A. HILLER,—Tin, Copper and Sheet Iron Ware, Stoves, House Furnishing Goods, &c., *1815 Carson St., S. S.*

Mr. Hiller succeeded Geo. L. Fischer in the business he now carries on so successfully. His stock is estimated at \$1,500, and his business yearly reaches the handsome amount of \$5,500. The buildings occupied by the works of Mr. Hiller are a three-story brick structure, 24 feet front and 45 feet deep, and a workshop in the rear of 16 feet by 35 feet. The premises include store, workshop and wareroom. Two hands are employed besides the proprietor, and the monthly wages paid out will amount to \$150. The trade is chiefly local, and the work done by Mr. Hiller being substantial and thorough, gives very general satisfaction. The demand for all his manufactures is such as to promise a gratifying increase at no distant day. Mr. Hiller was born in Germany in 1847, and came to this city in 1856. He is a quiet, respectable and worthy citizen.

N. Y. & CLEVELAND GAS COAL CO.—Gen. Office, 89 Wood St.

The past and present importance of the coal trade with reference to the industries of Pittsburgh, as well as the development of the resources of the whole country, can hardly be over-estimated. It has attracted a vast amount of capital from other States and cities, and numerous companies have been organized for the purpose of developing this prominent branch of the industries of this community. Among the most noteworthy of such institutions is the New York and Cleveland Gas Coal Co., a joint stock company, with a capital of \$600,000, chartered some years since under the mining and manufacturing laws of Pennsylvania, and officered as follows: Wm. A. McIntosh, Esq., President; A. Carnegie, Esq., Vice President; Wm. P. DeArmit, Esq., Treasurer, and T. Axworthy, Agent at Cleveland, Ohio.

As miners and shippers of Youghiogheny Coal the operations of this company are extended and comprehensive, and while about two-thirds of their product is consumed by Pittsburgh, the balance finds a market in many of the Western cities for the purposes of gas companies, for which it is peculiarly available. Two of the mines of this corporation are located at Turtle Creek, 15 miles east of this city on the P. R. R.—three on the A. V. R. R., situated respectively eight and eighteen miles east. The total operations of the company engage the labor of 700 men, two locomotives working on the tracks of the company, between the headings of the mines and the railroad, a distance of five miles, and 250 rail road cars, machinery and modern mining appliances.

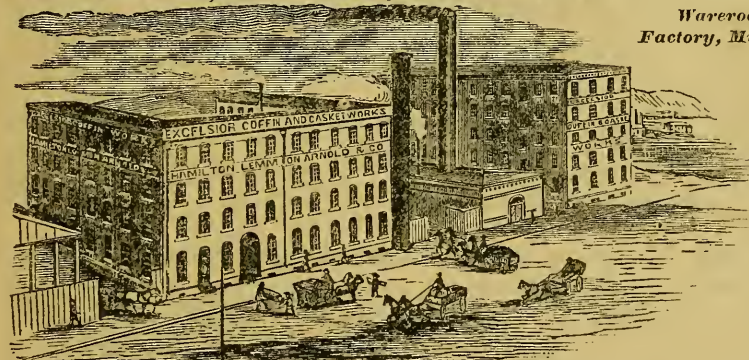
The product of the company will reach half a million tons of coal annually—worth from \$800,000 to 1,000,000, according to the condition of markets and the rate paid for mining. As one of the largest institutions of the kind engaged in this vast industry so promotive of the general advantage, the New York & Cleveland Gas Coal Co. deserves special mention, as well for the extent of its operations as the liberal and conservative policy with which they are conducted.

ARTISANS INSURANCE COMPANY,—Cor. Wood St. and 3d Ave.

It is a fact worthy of the marked attention, both of capitalists and the public, that throughout the great commercial depression, beginning in 1873, and occasioning the most unparalleled losses by the failure of corporations and private firms and individuals, the underwriting companies of this city, though perhaps curtailed in the extent of their business, have presented a solid front of solvency to the storm, which has not so far been broken in one single case. Among those well known corporations in this department that are capable of sustaining almost any pressure, the Artisans Insurance Co. is conspicuously prominent. Incorporated under the Insurance laws of Pennsylvania, in 1866, with a capital stock paid up of \$100,000, the company commenced and has since continued its career under the most favorable circumstances and judicious management. The officers and directors are well known as being largely and successfully engaged in other branches of business, and as men possessed of ample resources. The President, Mr. Wm. H. Smith, is also chief executive officer of the Artisans Deposit Bank. Mr. John Moorhead, Vice Pres't, is engrossed in the iron commission business and other enterprises. Among the directors are names bearing great significance in connection with some important industry. Abraham Garrison, of the firm of A. Garrison & Co., one of the oldest and most responsible firms in the city, is also President of the Diamond National Bank; Mr. James P. Barr is editor and proprietor of the Daily and Weekly Post; Malcolm Hay, Esq., is widely recognized as one of the first Attorneys at the Pennsylvania bar; John Dunlap, manufacturer of Tin Ware, has the largest establishment of its kind in Pittsburgh; Wm. Haslage and Sullivan Johnson are successful Grocers; Madison Bailly, Coal merchant and Vice Pres't of the Central Bank; Frank M. Hutchinson, Sect'y of the P., F. W. & C. R. R.; John Birmingham, of Birmingham, Watson & Co., Anchor Cotton Mills; and D. McKee, of McKee & Co., Glass manufacturers. The Secretary of the company, Mr. A. J. Barr, is well known among the fraternity of underwriters in this city as having unusual capacity for the conduct of the business. T. M. Reger, No. 334 Walnut St., Philadelphia, is the agent of the company in that city. Cautious in the assumption of risks, and prompt in the payment of losses, the Artisans Insurance Company is a favorite with all classes, and entirely merits the success attending its operations.

HAMILTON, LEMMON, ARNOLD & CO.—Excelsior Coffins & Caskets.

Warerooms, 356 Penn Av.,
Factory, Mulberry St., Allegheny.



In this special line of industrial manufacturing enterprise there is perhaps no house in the United States better known, or one more entitled to extended notice in a work devoted exclusively to a display of the resources in detail of the Iron City.

Established in 1864, the firm is composed at present of the following members, each of whom takes an active personal interest and supervision in some department of the work. Wm. Hamilton, Brice Lemmon, Jas.

T. Arnold, J. W. Carnahan, John H. Mower and Adam Ammon, all practical men, either in the operative or business subdivisions of the concern. The plant is located on Mulberry street, in the lower part of Allegheny City, on the banks of the Ohio river and contiguous to the freight offices of the Pittsburgh and Cleveland Railroad Co. It consists of four extensive buildings, one, two, four and five stories high, the two first mentioned having dimensions of 40x120 feet each, and the last respectively 120x80 feet and 40x160 feet, covering in all an area of nearly three acres. Here are employed 132 skilled mechanics, 2 engines and 3 boilers of 80-horse power each, and 2 pumping engines. All the machinery being of the most perfect character, much of it designed and applied originally for the special uses to which it is adapted. The manufactures of the firm consist of Burial Cases, Caskets and Coffins of Fine Rosewood, Walnut, Imitation Rosewood, Gloss White, Ebonized and numerous other styles and materials, for the elegance of which a reputation has been established all over the country, promoting a trade that comprehends in extent the entire United States. The firm are large manufacturers of Handles, Plates, Screws, Linings, Robes, etc., resulting in an annual trade equal in amount to the capital stock—\$250,000—and steadily increasing.

With so useful a place among the general industries, and a trade so large and productive of such a satisfactory revenue, the house of Hamilton, Lemmon, Arnold & Co. exert no small influence upon the general prosperity, and are justly classed in their specialty among the first houses in the United States.

CHAS. H. ARMSTRONG & SON, — Pure Youghiogheny & Connellsville Coal.
Offices and Yards, Liberty & 29th Sts., & foot of Ross St. & 2d Av., near Moorhead's Mill.

This eminent house, whose reputation is co-extensive with the United States, deserves more space at our hands than we usually bestow upon similar establishments. Its history will be found entertaining and instructive. Mr. Armstrong, the senior member of the firm, was born in Ireland and emigrated to this country in 1838. Upon his arrival in the United States, he engaged in agriculture in the East, and after some time happily spent in this honorable calling, came to Pittsburgh. Here he took for a season employment in lead works, but directed by a hearty and natural preference of the country, he procured a farm and entered with characteristic energy upon the business of a dairy. But this pursuit he did not follow long. We find him next engaged in the grocery business, at the corner of Fulton street and Centre avenue. But, as before, the restless energy of his character prompted change, and although his integrity and capacity must have commanded success, he also quitted this business, and, in 1856, found a proper field for the exercise of his talents and enterprise in the Coal and Coke business. With this vast and growing business his name has been identified for almost a quarter of a century. We shall now say a few words about the extent and importance of the Coal and Coke business of Chas. H. Armstrong and Son. The coal mines of this firm are situated on the Youghiogheny river, and are considered among the most extensive in that famous region. Miners to the number of 200 find constant and remunerative employment at these works, and coal to the amount of 300 tons is daily brought forth from the dark caverns of the earth. From this coal coke of the best quality is produced, and such is its reputation that it now has the undisputed control of the market as being almost indispensable in the smelting of steel and general operations of the foundry. This kind of coke is technically known as *slaked coke*. Its manufacture is made a specialty by this establishment, the coke being entirely free from sulphur and other noxious impurities. As may be inferred from the extent and capacity of this firm, many of the largest iron houses of the city are supplied by it with coal and coke and a large and increasing demand comes from private families. A store, admirable in all its arrangements, is kept at the mines for the accommodation of the workmen. This great and thriving establishment has been built up and sustained by the industry and energy of Mr. Armstrong. Seldom has such success been better deserved or more modestly enjoyed. The native character of the man, frank, social, upright and genial, is untouched by the selfishness which sometimes accompanies the accumulation of riches and a successful career. The sterling qualities of the man are rendered more conspicuous and serviceable by his success in life, but would have adorned his character under the most adverse circumstances. We may add that Mr. Armstrong represented the citizens of the Twelfth Ward many years in our city councils. He was a most popular and efficient member. Mr. Armstrong was also the originator of the "Consolidated Gas Company," and its first president. Its success was largely due to his judicious services and enlightened supervision.

C. H. Armstrong, Jr., the younger member of the firm, was born in Pittsburgh in the year 1854, and growing up in the business of his father has thoroughly mastered it in all its multiplicity of details and ramifications, being specially conversant in every department of the establishment. He possesses great and varied attainments and is a very popular young gentleman.

JOS. S. FINCH & CO. — Distillers of the Golden Wedding Rye Whiskey.
Second and Chestnut Sts., South Side.

Among the various extensive manufacturing establishments, which have given the city of Pittsburgh a world-wide reputation as a great industrial centre, we doubt if any single one has contributed more to that end, than the mammoth distilleries of Joseph S. Finch & Co., whose celebrated brand of Golden Wedding Rye Whiskey may now be found in almost every portion of the globe, and in every clime where a first class, strictly pure and unadulterated article is appreciated. This house was founded by the present proprietors in 1863, with moderate means and in a comparatively small way, but at its very inception it acquired, and has since maintained a very high reputation for the general excellence and uniform reliability of the goods manufactured, and its business has increased with rapid strides, until it to-day ranks among the foremost establishments of its kind in the United States. Messrs. Finch & Co. have now a stock in bonded warehouse valued at not less than \$600,000, and their annual sales will exceed half a million dollars, with a constantly increasing demand from all sections of the country. Six spacious and commodious structures are acquired to carry on this extensive business, which are located on Second and Chestnut streets, South Side, and are of the following dimensions respectively, one 60x150, one 110x110, one 50x81, one 40x80, one 75x110 with one building used for offices 23x73. All the machinery used is of the latest and most approved construction. We may especially mention the powerful sixty-horse power engine, four double-flue boilers 28 feet long by 48 inches in diameter, and five of McKnight & Co.'s perfected steam pumps. Twenty experienced workmen are constantly employed in the various departments at a monthly expense of \$1,200. Mr. Finch is the inventor of a peculiar process of removing deleterious substances and peculiar flavor of new whiskey, retaining all its healthful and nutritious qualities, and the late product of the still treated in this manner, has all smoothness and other properties ordinarily acquired only by age, and becomes at once palatable, exhilarating and beneficial to the consumer. This is an important desideratum, as the finer grades of Whiskey can be afforded at lower prices than when they are subjected to the risks, expenses and outlay of capital required in the ordinary process of acquiring these properties. The individual members of the firm are Messrs. Joseph S. Finch and John W. Painter, both gentlemen well and favorably known in the mercantile community, and highly respected in the various relations of life. It is to the enterprise, ability and energy of such houses as this, that the Smoky City is indebted for the proud position she holds among the cities of the Union.

W. J. MILLIGAN, — Groceries & Provisions, Bidwell & Pennsylvania Ave., Allegheny.

Mr. Milligan became proprietor of the old established and well known grocery store, corner Bidwell and Pennsylvania avenues, in March, 1878. This house has been in existence for many years, and has always enjoyed a liberal patronage. Mr. Milligan carries a well selected stock of Fine Teas and Choice Family Groceries of every description, and fresh vegetables in season. His stock is valued at about \$2500, and his annual sales will reach \$20,000. He occupies a spacious three-story brick building, 20x60, employing two hands at a monthly expense of \$150. He has a large local trade in the immediate vicinity of his establishment, and also transacts considerable business with the residents of the rural districts adjacent, especially among the farmers and gardeners of Allegheny county. Mr. Milligan was born in Allegheny in 1856, and has always resided in the city, where he has a large circle of acquaintances, and has established a prosperous and flourishing business.

M. P. SMITH, — Saddles, Harness and Trunks, No. 37 West Diamond St., Allegheny.

This business was established in 1871 by Mr. Smith in a small way, and with limited capital. By strict attention to business and the uniform excellence and superior quality of all his work, his trade has steadily increased, until it now will compare favorably with any similar establishment in the city. He occupies the entire building, two-story brick, 20x50, at No. 37 West Diamond street, carrying a full and complete stock of Saddles, Harness, Collars, Bridles, Whips, Trunks, etc., valued at not less than \$3,000, and transacting an annual business amounting to more than \$10,000. He gives constant employment to five experienced workmen, at a weekly expense of about \$60. His trade is located principally in Allegheny and in a circuit of fifty miles. Mr. Smith is a native of Allentown, Pa., and was born in 1843. He learned his trade in Pittsburgh, and is a careful, conscientious and competent workman.

CULMER SPRING CO.—Spiral Springs, Office & Works, Cor. 26th & Liberty St.

The special branch of manufacturing industry pursued by the Culmer Spring Co., is one of such importance, and withal so conducive to the industrial advantages of the community, as to be deserving of particular mention in this work. The present organization was founded in 1873, and in 1874 they purchased and added to their already large and growing business, the entire business, good will, stock and plant of the Keystone Spiral Spring Works, which were organized in 1868, thus adding to their own growing business the extended trade of that concern. Mr. Henry A. Breed being President and Treasurer, and Messrs. Geo. W. Morris and Thos. C. Carson special Traveling Agents of the concern. The plant of the company is located as above, and consists of one large building, thoroughly adapted for the purposes required, in size and general appointment, being 100 ft. square and supplied with the most powerful machinery for the manufacture, test and compression of Springs. The material employed by the company is invariably of the best quality of Pittsburgh Crucible Cast Spring Steel made, selected and kept in stock by the manufacturer especially for this concern, whose treatment of the metal by furnaces of its own design, and processes resulting from wide experience and metallurgical knowledge, is calculated to retain in its highest perfection the elastic qualities of the steel, and eliminate such imperfections as may have followed the first processes of its manufacture. Before being applied to any given object, each Spring is subjected to the most rigid and systematic tests, thus insuring thorough reliability in every case. The main product of the company is in Rail Way Car Springs, for broad and narrow gauge roads. Freight Bolster and Equalizing Bar Springs, Coil Draft Springs, Street Car Springs, Brake Release, Switch, Valve and Machinery Springs of every description, and it is not an exaggeration to say, that no contemporaneous concern in the country produces more satisfactory results, if equals the quality of the goods turned out by the Culmer Spring Co. They make a specialty of Spiral Springs. A very general knowledge of this fact on the part of Rail Way authorities at home and abroad, has led to a demand for these Springs, that engages the constant activity of the works and insures a large and increasing revenue.

Mr. Breed, who as President and Treasurer takes charge of the general business as well as the finances of the Co., is a native of this city, and a son of the late George Breed, Esq., one of the old merchants of the regime, whom Pittsburghers are proud to remember. Since 1860, when but 18 years of age, Mr. Breed has been immersed in business, adding to the industrial well being of the community, and promoting within the range of his influence the manufacturing interests of the Iron City. Possessed of numerous valuable patents, unrivalled facilities and adroitly managed, the Culmer Spring Co. is fully entitled to the high position it occupies, and the signal prosperity that attends its operations.

Glass, China, Queensware, &c., 134 Wood St.

W. P. Greer

The house of Greer & Laughlin, of which W. P. Greer is successor, was opened May 31, 1877, with a small but very carefully selected stock of China and Glassware. Mr. Greer had no previous experience in the business, but fortunately he had acquired thorough business habits, which long continued practice had so rooted into his life that they seemed a part of his character. Combined with these he also possessed rare good taste, which experience had cultivated and refined. The house of Greer & Laughlin was successful from the outset, and soon attracted the attention of the better classes, especially those interested in the Ceramic art. Here they found the rarest novelties and oddities, the quaintest designs, and the most curious specimens that French, Dutch, English, Irish and American potters and artists ever contributed to the Ceramics of the world. Early in 1878 Mr. Laughlin withdrew from the house, and since that time Mr. Greer has continued the business alone. His trade has steadily improved, and he has been compelled to increase his stock fourfold in order to meet this growing demand. Three large floors, each 22x60 feet, cellar and attic are packed with fine French china from the celebrated Haviland, creamy-looking English wares from the famous potteries of John Edwards, beautiful Chamber Sets of the most popular manufacturers, and Glass and Stone Ware from all quarters of the globe. Mr. Greer's business is exclusively retail. He employs from four to six men constantly, and carries a stock varying in value from \$15,000 to \$20,000. Mr. Greer is somewhat eccentric in his notions and ideas, scrupulously correct in his dealings, and very prompt in meeting all his engagements. He went to work for himself when but fifteen years of age, and when quite young was admitted to a partnership by J. W. Carnahan, a shoe merchant of Market street. On retiring from this firm he entered the service of the Excelsior Coffin Company, and for some years traveled nearly all over the Union in its employ. He owns considerable real estate in Pittsburgh, and now owns and lives in the house in which he was born.

PENNSYLVANIA INSURANCE CO.—Germania Bank Buildings, Cor. Wood and Diamond Sts.

As a representative home Insurance Company that has been the outgrowth from the utilization of the surplus capital of our community, the Pennsylvania Insurance Co. demands special attention in a work devoted to a detailed review of our city's business and institutions. The original charter, granted in 1852, gave the company power to insure live stock only. In 1854 more extensive franchises were secured, and the company, under these, changed its business to that of Fire and Marine Insurance, and later dropped the Marine and became Fire Insurance exclusively, including in its liberal business policy the insurance against loss of damage by lightning, an indemnity afforded by very few companies. Since its incorporation its management has been such as to show the most satisfactory results, and guarantee to the public and policyholders the most positive proof of its elements of growth and solidity.

This is what is known to the insurance fraternity as an "Agency Company," and has established agencies in Philadelphia, Lancaster, McKeesport, Belle Vernon, Washington, D. C., St. Louis and at other points through which sections of the country the company has become recognized with public favor, in a very deservedly eminent degree. With a paid up capital of \$115,800, and assets Jan. 1, 1879, of \$179,122.31, the management is such as to make the stock of this company a safe and lucrative investment, and to be a source of great satisfaction to the insured, as being a positive source of remuneration in case of disaster. The officers of the company are among our most substantial and careful business men and ablest underwriters to wit: C. Yeager, Pres't. C. C. Boyle, Vice-Pres't, Thomas D. Keller, Secretary, with a board of Directors, composed of equally prominent and reliable citizens.

JAMES HAY,—Practical Plumber, Steam & Gas Fitter, No. 12 Ohio St., Allegheny.

Mr. Hay is a practical plumber and mechanic of twenty-three years' experience and has been engaged in business for himself for the past nine years. He was for six years located in the Allegheny Diamond, but for the past three years has occupied the two-story brick building, 20x60, at No. 12 Ohio Street, where he may now be found. He carries on the general business of Plumber, Gas and Steam Fitter and House Drainer. Among the specialties of his business are Sheet Lead work of every description, Tanks and Agitators lined and either wiped or burned with hydrogen blow-pipe. Country residences supplied with water by Hydraulic Rams, Cellars Cemented or Concreted, and all kinds of repairing attended to. He is also sole manufacturer of McKissock's Patent Automatic Water Closet Cistern, a valuable invention, which is being widely introduced. He carries a stock of about \$1,000, and his annual business amounts to \$11,000. He employs six competent and experienced workmen, whose weekly pay amounts to \$75. His business is principally in the city and on the better class of country residences. Mr. Hay was born in Scotland in 1843, and came to the United States in 1869.

BECKERT & BROS.—*Florists and Seedsmen, No. 53 Federal St., Allegheny.*

One of the most attractive floral displays to be seen in the two cities, is at the establishment of J. Beckert and Bros., 53 Federal St., Allegheny. This old well known house was founded about 50 years ago by Christian Beckert, sr., father of the present proprietors, who have been engaged in the business about twenty-five years. The increase in their trade has been large and encouraging, they now carry a stock of about \$20,000, comprising every article required in a first-class Seed and Floral establishment, their warerooms, 22x100, three floors, are filled to repletion with a beautiful assortment of choice Plants, Flower and Vegetable Seeds, Flowers, Shrubs and Bulbs, together with fancy Baskets, Aquariums, Ferneries, Brackets, plain and ornamental Flower Pots, etc. The firm occupies eleven greenhouses, situated on Troy Hill, filled to repletion with ornamental and bedding Plants, besides 300 to 400 cold and warm frames for the growing of the harder varieties of Flowers and Vegetable Plants. Their large and extensive nursery contains all the necessary convenience and buildings requisite for the successful propagation of Flowers and Fruits, and the prosecution of the business in which they are engaged. They have twenty-two acres of ground in a high state of cultivation, employing a large force of practical hands. The members of the firm have had a life long experience in the business, and are thoroughly practical in all the details of the business. The cut-flower department is made a distinct feature of their business. Having a number of greenhouses specially arranged for the promotion of Blooms, they can supply at all times an abundance of fresh and choice flowers for weddings, funerals or other decorative purposes; special attention is also devoted to the decoration of churches, halls and parlors. In this branch of industry, this old and reliable establishment stands specially prominent, if not at the head. In beautiful and artistic floral decorations, in variety and quality of productions, this house stands second to none in this section of country.

P. KEIL & SON,—*Commission Merchants, No. 331 Liberty St.*

This old and reliable house was first founded by Siebert, Thompson and Keil. The firm name and style has undergone many changes, among which we notice "Siebert, Keil and Ritchart", "Peter Keil", "Rea and Keil." In 1877 Mr. J. T. Keil a son was admitted, and the present firm name was established. It will be noticed through all the changes, the present name Keil has been prominently associated with this house for more than twenty years. This establishment has occupied a high position among the representative business houses of the smoky city. Receive consignments from all sections of the country, and their commission transactions are very extensive. They also deal largely in Grain, purchasing exclusively for cash, thus enabling them to offer extraordinary inducements to purchasers. Barley and Malt are the specialties of this house, of which articles they handle immense quantities in the course of the year. They occupy the commodious four-story brick warehouse, 22½x110, at No. 331 Liberty St., employing two assistants and transacting an annual business of about \$128,000. From the nature of their business, it is unnecessary to carry a large stock on hand, as they are constantly receiving and shipping goods pertaining to their line of business. Their trade is largely local, although it extends to a greater or less extent all over the Union. Mr. P. Keil is a native of Germany, but came to this country when a child. He has for many years been identified with the business interests of Pittsburgh.

F. MALSCH,—*First Ward Meat Market, No. 260 Rebecca St., Allegheny.*

Mr. Malsch, the enterprising proprietor of the First Ward Meat Market at No. 260 Rebecca St., Allegheny City, is a native of Germany, but came to this country when twelve years of age. He has followed the butchering business since a young man, and for the past eighteen years in his own name. His present location has been occupied by him for ten years, and he has built up a flourishing and lucrative business, killing about one hundred and fifty beeves, averaging 1,400 pounds each, and a large number of calves, sheep and hogs annually. He furnishes customers with the very best fresh meat in the market, and cures a considerable quantity, besides manufacturing Sausage for his own trade. He owns the building occupied by him as residence and market, which is an elegant two-story brick 64x100, with gothic roof and furnished in the best manner. His slaughter and ice houses are on the same premises, making it one of the most convenient establishments of its branch in Allegheny City. In an architectural point of view the edifice is a credit to himself and that portion of the city in which he resides.

M. VEIOCK,—*Boots, Shoes and Gaiters, No. 137 Federal St., Allegheny.*

An experience of over thirty years as a practical Boot and Shoe Maker gives Mr. Veiock advantages which are possessed by few. The present business was established by Mr. Veiock in 1847 upon a comparatively small scale, but as his trade increased, he has from time to time enlarged his store and added new improvements and facilities. He now occupies the two-story brick building, 13x90, at No. 137 Federal street, Allegheny, and employs on an average four or five experienced workmen. All work turned out by him is made from the best French and Domestic Calf, and is superior, both as to quality, comfort and style. Mr. Veiock enjoys the patronage of many of the first families in the city and surrounding towns and is a thoroughly reliable gentleman to deal with. He has been a resident of Allegheny City since 1840.

E. J. SMITH,—*Harness, Saddles, Trunks, &c., No. 37 South Diamond St., Allegheny.*

Mr. Smith started in business eight years ago with his brother, and for five years they continued together and did a flourishing business. In 1876 the firm dissolved and Mr. E. J. Smith opened at his present location, No. 37 South Diamond street, next door to the Bepler Hotel, where he occupies the large two-story brick building, 20x160, employing four experienced hands in the manufacture of Harness, Saddles, Whips and Trunks, and carries a stock of about \$4,000, transacting a business of from \$10,000 to \$12,000 annually. His trade, which is derived from the city and adjacent towns, is steadily increasing. Mr. Smith was born in Berks county, Pa., and has been a resident of Allegheny since 1862.

W. THOMAS,—*Merchant Tailor, No. 301 Beaver Av., Allegheny.*

The residents of that portion of Allegheny City formerly known as Manchester are familiar with the name of Mr. Thomas, who has been established in the Merchant Tailoring business in that locality for the past ten years. His salesroom is situated at No. 301 Beaver Avenue, and is a capacious and conveniently arranged apartment, 20x140, stocked with a fine assortment of foreign and domestic piece goods of the most desirable fabrics, from which he is prepared to make to order fine fitting and stylish suits at prices ranging from \$15 to \$40. Mr. Thomas is a practical tailor and cutter and employs six experienced workmen. Doing his own cutting, and being at a comparatively small expense, he can offer better inducements than those who are compelled to pay exorbitant rents in the city proper. Mr. Thomas is a native of England and came here fifteen years ago.

J. C. RISHER & CO.—Coal, Office, No. 116 Water St.

As the center of the coal trade of Western Pennsylvania, and the source of supplies upon which the West and South mainly depend for fuel, both for domestic and manufacturing purposes, Pittsburgh is the basis for enormous operations in this product, conducted by numerous corporate and individual enterprises, requiring in the aggregate almost unlimited resources and the labor of thousands of men in the various departments. Among those firms whose transactions have assumed the greatest magnitude may be properly classed that of J. C. Risher & Co., which, established in 1861 by the senior partner and Mr. Stephen S. Crump, has continued from that time, and under the same title and management, the successful prosecution of the trade, which is divided into three distinct departments, viz: producing, shipping and selling. As producers, the firm have unrivalled advantages in the possession of 350 acres of coal land, situated on the second pool of the Monongahela river, about half a mile above McKeesport, at Drarossburg. From the mines upon this property are extracted 2,000,000 bushels of coal annually, and here are employed 200 miners and others necessary to the success of the work. The shipping department includes a saw-mill and boat-yard on the property at Drarossburg for making and repairing the boats, barges and flats of the company, and in this part of the labor 25 men are engaged. The firm own and run a regular line of 100 barges between the mines and Southern markets and 40 coal boats. Numerous hands are employed in the transportation department, entailing an expense upon the Company of \$1,600 per month, the total cost of labor annually being about \$75,000. In addition to the assets already mentioned, the list might be extended almost indefinitely by enumerating the buildings for dwellings and other purposes on the property, mules, cars, tracks, shoots, screens, steam engines, and all the various appliances and improvements naturally appertaining to so considerable a scheme.

In disposing of its products the firm avoids the local market entirely and divides it about equally between Cincinnati, Louisville and New Orleans, in which places are regular agencies for its disposal to the retailers.

After a prosperous and successful career of nearly twenty years, the firm of J. C. Risher & Co. are pretty generally recognized as being among the very first in the trade, having acquired a reputation in that period that reflects the highest credit upon those characteristics of promptness, reliability and enterprise for which the house is known. Promoting the industrial interests of the community and conducting in no small degree to its general welfare, the firm of J. C. Risher & Co. is certainly deserving of the estimation in which it is held and the results attending its effort and enterprise.

W. N. KRATZER, Jr.—Mattresses, Bedding & Curtain Goods, 37 Ohio St. Allegheny.

The Mattress and Bedding warehouse at No. 37 Ohio street, nine doors from the Diamond, west of Federal street, was established in 1872 and has been conducted by different owners, by whom a large business was done, until, in 1878, Mr. Kratzer became owner and proprietor, and under his management the business has steadily increased to the present day. Mr. Kratzer occupies the brick building, 18x60, at the number named, employing nine hands at a weekly expense exceeding \$50, and carrying a stock valued at about \$2,000. His yearly sales will approximate \$8,000. He manufactures Mattresses and Bedding of every description and keeps a fine assortment of Curtain Goods. The specialty of this house is in renovating feathers, for which purpose steam is used, and the most approved processes are adopted. Mr. Kratzer has the sole and exclusive right to manufacture the celebrated Palace Bed Lounge, which is noted for its perfect simplicity of construction, being so contrived as to be easily taken to pieces and cleaned in a few moments, offering no harbor for those pests of the household, bed-bugs. It possesses all the essential qualities of a first-class bed for ease and comfort, and is not only economical but ornamental. Mr. Kratzer is a native of Pennsylvania, and was born in 1856. He is an energetic and thoroughly reliable young business man.

S. P. ARMSTRONG & CO.—Wh' sale & Retail Grocers, 41 S. Diamond, Allegheny.

The well-known Wholesale and Retail Grocery House at No. 41 South Diamond, Allegheny, was founded by Kirk & Allen, who erected the building now occupied by S. P. Armstrong & Co. twenty-three years ago. They were succeeded by Horne & Riddle, who carried on the business for five years, when the firm became Horne & Hadley, who continued for two years, or until 1868, when the present proprietors came in possession. They carry an average stock of about \$8,000, comprising a general assortment of Fine Family Groceries, Choice Teas, Flour, Sugar, Coffee, Salt, Fish, Bacon and Country Produce, employing four assistants and transacting an annual business of over \$50,000. In more prosperous times their sales have reached \$100,000 per year. Their trade is principally in the two cities and throughout Allegheny, Beaver, Butler and Lawrence counties and along the lines of the P., Ft. W. & C. and the West Penn. R. R's. In the season this firm are extensive buyers of Wool and Seeds, and are well and favorably known throughout the country districts as honorable, fair dealing gentlemen in whom every confidence may be placed. Mr. Armstrong is a native of Allegheny City and has been actively engaged in the grocery business since he was a young man.

W. H. COLEBAUGH,—Photographer, No. 19 Federal Street, Allegheny.

While it must be admitted that the sun cannot fail to reproduce whatever object is placed before the camera, it is still a fact that the success of a photographic likeness must depend largely upon the artistic skill of the operator in selecting the proper position and light, and in finishing the picture in a proper manner, after the sun has completed his portion of the task. An artist who understands the various details and minor requisites to complete a satisfactory photograph is entitled to high rank in his profession, and such a one we can recommend in the person of W. H. Colebaugh, at No. 19 Federal street, Allegheny. This art gallery was established by Mr. Langfitt several years ago. He was succeeded by Mr. Chas. A. Trapp, and in the Autumn of 1877 by the present proprietor. His rooms are admirably lighted and arranged, and the pictures taken by him will compare favorably with those from any metropolitan establishment. He makes a specialty of copying and painting, and preserves all negatives for one year. Mr. Colebaugh is a native Pennsylvanian and was born in 1827. He is an artist who thoroughly understands his business and always gives satisfaction to his patrons.

A. SCHAUB,—Leaf Tobacco, 317 Liberty St.

Contingent upon the Tobacco trade and its numerous connecting industries, depends much of the prosperity of Pittsburgh, entitling those engaged in this branch of business to no small degree of consideration in this volume. At present a wholesale dealer in Leaf Tobacco, Mr. Schaub commenced business for himself 20 years ago on Tenth St. with a limited capital, aside from his industry and native aptitude for the able management of affairs. On the first of Jan. 1879 he moved into the premises located as above, sufficiently ample in dimensions, being 18½x110, to afford scope for the enlargement of a rapidly growing trade. Here will be found a choice lot of selected Leaf, to suit the various grades of manufacture, always at the lowest market rates, and even discounting these at times. The stock varies in value from \$10,000 to \$20,000, and the business will probably average \$25,000 to \$40,000 per annum. Mr. Schaub is originally from Germany, but having been a resident of this city for 21 years, is thoroughly identified with its general interests, to promote which he has labored very effectively. Enterprising, honest and energetic, Mr. Schaub is highly respected and cordially commended to the trade in Pennsylvania and adjoining States.

JAMES B. YOUNG & CO.—Phœnix Roll Works, 41st & 42d Sts., on A. V. R. R.

Among those special branches of manufacturing industry, for which Pittsburgh is peculiarly noted, the Phœnix Roll Works have attained a prominence that deserves more than passing mention in a work devoted to a detailed exhibit of the resources possessed by the "Iron City" of the United States. These works were established in 1861 by J. B. Young and remained some years, and sold out to Messrs. Bagley and Ballman in 1871, who successfully conducted the enterprise for some years, the firm changing to Bagley, Young & Co., and finally to its present title and membership in 1873. Originally a general foundry, it was discovered that the material employed for diverse purposes should be in structure and quality of different grades for particular ends, and that for the perfect casting of Rolls and Pinions, a uniformity in metal and process should be adhered to, incompatible with a miscellaneous business. In the manufacture of these specialties, therefore, the firm became exclusively engrossed, and the results achieved have been in the most marked degree signally successful. The present plant of the house is situated as above, occupying in all an area of over an acre, 40 hands being employed, at an average monthly expense of \$2,000. The trade, which extends over the entire Union, amounts to about \$80,000 annually, and is gradually increasing. The works are divided into two main departments, viz., founding and turning, the machinery and mechanical appliances and apparatus, throughout, being as perfect as inventive genius can devise or capital procure. Some idea of the capacity of this establishment may be gained from the fact that, with many other fine pieces of constructive mechanism, will be found 7 cranes, 11 roll lathes, 1 polisher, 1 planer, 1 machine lathe, 1 drill press, and a complete pattern shop, the motive power being supplied by a 18x30 engine. The individual members of the firm are Messrs. James B. Young, J. S. Seaman and Robert Sleeth, the last two being practical mechanics, Mr. Seaman directing the turning and finishing departments, and Mr. Sleeth having charge and supervision of the foundry, the business and financial operations of the concern demanding the attention of Mr. Young. The specialties for which the house is celebrated are the Semi-Steel Mixtures for Rolls and Pinions, patented by the firm, also Double Spiral Pinions, Iron Chill and Sand Rolls, and Seaman's Rounding, Straightening and Finishing Machine, the latter having been invented by Mr. J. S. Seaman. All the members of this concern are widely known and closely identified with the industrial progress of the city. Mr. Young being a native of this place, born in 1827, a member of select councils from the 17th and also one of the first directors of the ward chamber of commerce, and always interested in promoting those measures best conducive to the well-being of the community. Mr. Seaman was born in 1839 at Harmony, Pa., and for a quarter of a century has resided in Pittsburgh, while Mr. Sleeth, though originally from Ireland, born in 1828, has been respected as a citizen of this city for about 34 years. In the particular branch of business pursued, the firm of James B. Young & Co. have no contemporaries who produce the same class, grade or character of work, and but few who can offer advantages at all comparable to those guaranteed by this concern, a statement well attested by the experience of among the large number of works, the Edgar Thomson Steel Works, Black Diamond Steel Works and Union Iron Mills of this city to which reference is made, all these establishments having in use the rolls manufactured by this firm. There are no other establishments in the world that make an exclusive specialty, and devote so large a space to the manufacture of Rolls and Pinions, and the large success attained speak volumes for the foresight and enterprise of the firm.

THOMAS BROWN,—Plumber, Gas & Steam Pipe Fitter, 55 Federal St., Allegheny.

For more than thirty years this house has been in successful operation under various administrations. It was founded by Maffit, Olden and Baliff, and continued by them until 1860, when the firm was dissolved, and Baliff and Brown succeeded to the business. In 1865 Mr. Carson was admitted under the firm name of Baliff, Brown and Carson. In 1870 the firm again became Baliff and Brown, and in 1875 Mr. Brown became sole proprietor. He is at present the oldest plumber in Allegheny engaged in this business, and probably the best known of any one in the two cities. He learned his trade in Pittsburgh with the well known house of Sheriff and Tate nearly a quarter of a century ago, and is a thorough practical workman in all branches of the business. He now occupies the commodious warerooms No. 55 Federal St., employing ten hands at a weekly expense of \$140. He carries a stock of about \$5,000, and transacts an annual business of not less than \$15,000 in the two cities and surrounding towns, doing every description of Plumbing, Steam and Gas Fitting, etc. Mr. John R. Watson, the popular book-keeper of this house, has been with it through all its various changes. Mr. Thomas Brown is a native of Allegheny City, and has for many years been identified with the business and material prosperity. He has been in the council for over twelve years, and is at present a member from the third Ward. He is a gentleman highly esteemed in the community, and as a successful business man may be ranked among her foremost citizens.

HALPIN & HUMBERT,—Plumbers, Gas & Steam Fitters, 30 & 35 4th Ave.

This is one of the best known houses in the Smoky City engaged in this line of trade. It was founded twenty-two years ago by W. and S. Jarvis with a small capital and limited facilities. The business was conducted by them for seven years, when the firm name became Jarvis, Halpin & Co., who conducted the business successfully for fourteen years. On the first of February 1878 the present firm name was established under the judicious management of Halpin & Humbert. The trade of this house has largely increased, from careful investigations it is apparent this establishment does a business largely in excess of any other house devoted exclusively to the same line of business, while its patrons are largely composed of the leading business and wealthy classes. William Halpin, the Sr. member, was born in Ireland in 1830, came to this country in 1847. Mr. Chas. H. Humbert is a native of Pittsburgh, and was born in 1853. He is a practical Plumber and a gentleman of long experience in that line. They occupy the spacious three-story brick edifice 22x60 at the numbers mentioned above, giving employment to fifteen experienced workmen, with a weekly pay roll averaging \$150. They keep a full line of Gas Fixtures, Iron, Stone and Lead Pipe and Water Fixtures in general. They are also sole agents for the Backus Water Motor and the Globe Ventilator and Chimney Cap, and make a specialty of refitting Gas Fixtures of every description. They have in use a hand screw cutting machine, that is noted for its perfect and rapid work. Their trade, which is steadily on the increase, is principally derived from the city and surrounding towns.

MANUFACTURERS & MERCHANTS INS. CO.—87 Wood St.

Capital, \$250,000. — Assets January 1st, 1879, \$341,405.39.

Pittsburgh, to its size and population, affords the most ample protection against the fiery element of any city in the Union. It is not chimerical, but of a solid character. Since the great fire of 1845 no failures in Fire Insurance Companies of any note have occurred, all the local companies prior to the disastrous fire were suddenly bankrupted at that time, and never able to proceed in doing business as Insurance companies. Much had been learned from that disastrous occurrence, however, and the Insurance business was established at a more substantial basis. Such is the character of the company that heads this article. It has through its career paid many losses, and stands unscathed and staunch as any of its competitors, with assets of nearly \$342,000, and shows a surplus over all liabilities of \$56,898.53. We herewith present the names of the officers and members of the board of directors for the year 1879: James I. Bennett, President, John W. Chalfant, Vice President, J. M. Kenney, Secretary, A. Ammon, General Agent. Directors: James I. Bennett, John W. Chalfant, A. E. W. Painter, Robert Lea, L. C. Pershing, Wm. Walker, M. W. Watson, Joseph Walton, John Wilson, S. F. von Bonnhorst, C. W. Bachelor, W. G. Park. The names here presented are so well known that no eulogy is necessary to convince the public of the claims of the Manufacturers and Merchants Insurance Company of Pittsburgh, Pa., for public patronage.

NELLIS, SHRIVER & CO.—Agricultural Steels & Irons, Rebecca St., Allegheny.

Among the most prominent manufacturing concerns in Pittsburgh or its surroundings the firm of Nellis, Shriver & Co. occupy a position that entitles it to consideration in this work. The plant of this house is located or bounded by Rebecca and Sturgeon Sts. and South and Allegheny Aves., Allegheny City, and was established in 1871 by A. J. Nellis, the senior partner of the present firm. The grounds upon which the works are situated, are 300x300 feet, and the buildings cover an area of nearly an acre, being divided into six operative departments, employing 100 hands, most of whom are skilled mechanics. A sixty-horse power engine is used to move the machinery, much of which is of the finest character, adapted and designed for special purposes, and a battery of three boilers, aggregating 75-horse power, furnishes the necessary steam. The products of this extensive establishment consist mainly in Nellis' Original Harpoon Horse Hay Fork, Steel or Wrought and Malleable Iron Fencings and Castings, Nellis' Grapple and Pulleys and Steels for Plows, and other agricultural implements; also Nellis' Patent Cast Tool Steel Castings, which seem to be almost indestructible, and may be so tempered as to be exactly adapted to any variety or conformation of soil. The demand for these appliances, owing to superior merit, recognized by high awards and medals at the Centennial Exposition, has led to a rapidly increasing trade, and its extension over the entire United States and Canadian provinces. Of the individual members of the firm, the senior partner is a native of New York State, and has been a resident of Pittsburgh since 1870. The enterprise with which he is identified was founded under the style of A. J. Nellis & Co., Mr. John Crawford being his partner, after whose demise Messrs. S. P. Shriver and J. H. Stokes became partners, forming the basis of the existing firm. Both these gentlemen are natives of Pennsylvania, the former settling in Pittsburgh as early as 1835, and the latter in 1860. Both from the extent of its operations, the character of its products, and the impetus given to the industries of the community, this house has achieved a conspicuous place among others in a coterminous line of business. The vast improvements made by Mr. Nellis in Cast, Cast Steel for Plow Shares, Harpoon Hay Forks and other appliances, and the monopoly in them, possessed by the firm, is alone sufficient to entitle it to more than ordinary attention. Besides these, however, numerous other articles are manufactured, all of which are of the finest make, and material such as to insure the greatest degree of durability and power. With these undoubted advantages and facilities Messrs. Nellis, Shriver & Co. offer inducements to the trade that can not be surpassed, and which buyers will find largely to their interest to favorably consider.

E. W. GROSS,—Fire Insurance Agency, Sixth Ave., cor. of Liberty St.

At this day no prudent business man or owner of property fails to provide against possible disaster and loss from fire, and consequently there is no industry or business associated with the interests of Pittsburgh more deserving of special attention. The agency of Mr. E. W. Gross was first opened in this city in 1870, and in consequence of the popularity and reliable character of the companies he represents, and his eminent qualifications for the position he fills, he has met with remarkable success, notwithstanding the stringency of the times. The companies he represents are: The Germania Fire Insurance Company of New York, which has a cash capital of \$500,000, a net surplus, Jan. 1, 1879, of \$754,423.72, and available assets of \$1,678,828.80; main office, 175 Broadway, N. Y. The United Fireman's Insurance Company of Philadelphia, established in 1860, one of the safest companies in the country. This company has a capital of \$200,000, and assets, March 1st, 1879, of over \$654,000. Home office, 408 Walnut street, Philadelphia. The German Insurance Company of Pittsburgh is also one of the companies he represents. It is rapidly growing in popular favor and confidence. Mr. Gross is one of the best posted men upon Insurance in the State, and these companies are fortunate in securing such able management for the city of Pittsburgh. He is prepared to take risks upon dwellings, manufacturing establishments, merchandise and household furniture at the lowest current rates, and, as is eminently proper, great care is exercised in the selection of risks. Six solicitors are employed with the business of this agency, chiefly confined to Pittsburgh, Allegheny and vicinity. Those interested in Insurance will do well to call and consult with Mr. E. W. Gross, No. 5 Sixth Ave., corner of Liberty St.

McHENRY & HOOD,—Commission & Wholesale Dealers in Grain, Seeds, &c. Cor. Liberty and Smithfield Sts.

For many years the firm of Messrs. McHenry and Hood have occupied a prominent and highly responsible position among the Commission Merchants and Grain Dealers of this city. The house was originally established in 1866 by S. L. McHenry, the present Sr. partner, and by the admission of Mr. John Hood six months later, became as at present with the existing title. The business of the firm as heretofore indicated is mainly in Grain, giving special attention to Wheat, both as independent Dealers and upon a Commission basis, the transactions annually amounting to \$100,000, with a capital of from \$15,000 to \$20,000, the trade not only being largely local, but extending to the great Grain markets West and East. To those, who are engaged in business in Pittsburgh, any commendation of this house would be altogether superfluous; for those readers of this work, who reside beyond the local reports of our prominent firms, it may be well to say, that the references of Messrs. McHenry and Hood are, Hitchcock, McCreery & Co., Marshall, Kennedys & Co., Citizens National Bank, all of Pittsburgh, and Rumsey, Bro. & Co. of Chicago, and George M. Hord & Co., Cincinnati. Both members of the firm are natives of Pennsylvania, and each for many years identified with the commercial interests of this community, which they have done no little to promote. As a desirable firm, with which to establish pleasant and profitable relations, McHenry and Hood are not only highly esteemed, but fully entitled to the prosperity that has attended an honorable career.

LOUIS STEITZ,—Druggist and Apothecary, No. 157 Pennsylvania Av., Allegheny.

Mr. Steitz, who is an accomplished pharmacist and chemist, commenced business at his present location eleven years ago. He has built up a flourishing business, keeping a full and complete stock of pure drugs, chemicals, fancy soaps, perfumery, toilet articles, and all goods pertaining to his line, valued at between \$4,000 and \$5,000, and his annual business amounts to not less than \$10,000. He occupies the four-story brick structure, 20x60, at No. 157 Pennsylvania Avenue, and employs two competent and reliable assistants, himself giving special attention to filling and compounding with accuracy physicians' prescription. Mr. Steitz was born in Germany, and has resided in this city since 1864. He is a thorough practical chemist.

W. L. KANN & CO.—Leather, Oils, Findings, &c., No. 213 Liberty St.

The house of W. L. Kann & Co., was founded in 1865 by Gustav Kann, who for 12 years continued the business. In 1877 he was succeeded by the present proprietors, under the firm name of W. L. Kann & Co. Both of these gentlemen are natives of Pennsylvania. They occupy three floors of the extensive warehouse, 30x150, at No. 213 Liberty St. They keep a large stock of manufactured leather of every description, oils, findings, etc. They are the manufacturers of the reliable brand of calf skin known as "Imperials," which is making a reputation on account of its many superior qualities, comparing in all respects to the best imported French calf. The firm have also a large currying shop in Allegheny City, where they make a specialty of furnishing harness leather, &c. Their trade extends through Pennsylvania, Virginia, Ohio and many of the Western States.

SPENCER, McKAY & CO.—Maltsters & Brewers of Ale, Porter & Lager Beer. *24th and Smallman Sts.*

The superiority of the Ale and Porter manufactured by the above well known firm has for many years been acknowledged by dealers and consumers throughout this section of the country, and the products of their extensive establishment have always met with a ready sale. Within the past year the firm has made extensive improvements and additions to their brewery, and introduced a new feature which promises to meet with universal approval. At an immense outlay they have perfected arrangements for manufacturing a superior quality of Lager Beer, the first brewing of which was placed upon the market May 3d of the present year, and has been pronounced by connoisseurs to be superior to any of the foreign brands which, owing more to the importunities of agents than to their intrinsic merits, have been introduced and sold in this city to a considerable extent. For years past Pittsburgh has been sending millions of dollars to other cities for beer. It is to be hoped that the movement so successfully inaugurated by this firm will soon establish the fact that our city, so long and widely noted for its superior ale and porter, can also produce beer of unsurpassed quality, and thereby secure the legitimate benefits of home production for ample facilities, and all the essential requisites for producing a first-class quality of Lager Beer. This brewery stands second to none East or West. Its present capacity is 200 barrels per day. The Phoenix Brewery was established in 1862 by Mr. Joseph Spencer and Mr. James McKay, and since that time the capital invested has been increased at least 300 per cent., their extensive buildings, three in number, on 24th and Smallman streets, cover over 2½ acres of ground, and are fitted with all the machinery and appurtenances requisite for conducting their immense business. One large boiler and three engines, of 40, 12 and 10-horse power respectively, are in constant use, and all their arrangements are first-class in every particular. Their vaults for the storage of Ale, Beer and Porter are probably the finest in the city, and the entire establishment, in all its departments, will compare favorably with any in the West. The average valuation of their stock is about \$200,000, and their trade, which extends through middle and Western Pennsylvania, Ohio, Indiana, Kentucky, Virginia, West Virginia and Maryland, will reach \$160,000 per annum. Seventy men are regularly employed at this establishment, with a weekly pay-roll aggregating \$842. Mr. Wm. Lockhart is principal bookkeeper and cashier with two assistants in the office and clerical department, and three salesmen devote their attention to the interests of the house in the city and suburban towns. R. N. Ray, who has represented the interests of the firm for 13 years through the South and other sections of the country, is now the general agent for this city. He is undoubtedly the right man in the right place. The individual members of the firm, as at present organized, are Joseph Spencer, James McKay, Robert Watson and Robert Liddell. Mr. Spencer is a native of England, and has resided in Pittsburgh since 1843. Mr. McKay was born in Ireland, and came to this city in 1850. Mr. Watson is also a native of Ireland, and has been a resident of the Iron City for the past 35 years. Mr. Liddell was born in England, and came to Pittsburgh in 1850, since which time he has been prominently identified with her business interests and material welfare and prosperity. At the last municipal election, held in 1877, he was elected Mayor of the city by a flattering majority, and since his induction to office has filled that responsible position with great credit to himself and to the universal satisfaction of the citizens of all classes and political views.

G. WEISSER, Agent,—Watchmaker and Jeweler, No 601 Penn Av.

Mr. Weisser commenced business in 1854 with a small capital of \$500. In 1869 he was enabled to erect the elegant and spacious three-story brick building now occupied by him as store and residence. This building has a frontage of 21 feet on Penn Avenue and extends back 100 feet. The first floor of which is occupied as sales room and work room. He carries a stock at present valued at about \$11,000 and his yearly sales will reach over \$5,000. He also keeps a full line of Foreign and American watches, an elegant assortment of solid silver and plated ware, jewelry, clocks and all articles pertaining to this line. His two sons are both practical watchmakers and jewelers and assist him in the business. Mr. Weisser was born in Germany, in 1818, and learned his trade in that country. He came to the United States in 1832. The failure of a bank sometime since caused him heavy loss, but he immediately set to work to repair his losses and is once more on the high road to success.

J. KOENIG & BRO.—Watchmakers and Jewelers, No. 579 Penn Av.

One of the most noticeable establishments along Penn Avenue is the tastefully arranged and elegantly stocked jewelry store of J. Koenig & Bro., located in the three-story brick building 17½x50, and No. 579. This house was founded in 1835 by Mr. J. Koenig, with a capital of only \$1,000. In 1873 Mr. August Koenig was admitted. Both gentlemen are practical and experienced watchmakers. Their average stock is valued at about \$30,000, comprising a full line of Foreign and American watches, solid and plated silver ware of the latest designs, French, German and American clocks, rings, brooches, chains and fine jewelry of every description. Their annual sales amount to \$8,000 to \$10,000, and their business is steadily increasing. Fine watch repairing is the specialty for which this house is particularly celebrated. Both members of the firm are natives of Prussia, but have for many years resided in Pittsburgh.

JAMES McFERRON—Groceries and Produce, No. 290 Beaver Av., Allegheny.

Mr. James McFerron is located on Beaver Avenue, where he started his business four years ago. He now occupies the three-story brick building, 20x50 at No. 290 Beaver Avenue, corner of Washington Avenue, with a stock valued at not less than \$2,000, and transacts an annual business of over \$15,000. He carries a full line of choice groceries, teas, flour, provisions and produce. Mr. McFerron was born in Ireland, in 1842, and has been a resident of Allegheny since 1864. He enjoys the patronage and confidence of many of the leading families in that portion of the city formerly designated as Manchester.

GEORGE CURRY,—Flour, Grain, Hay & Feed, 995 Penn Av.

In 1854 George Curry opened the first Feed store in the Eastern district of Pittsburgh in his present location, doing a good business. Mr. Curry was born in Ireland in 1831 near the city of Belfast. He was engaged in the wholesale and retail grocery business in the house of his brother in England, but came to the United States in 1851 and was employed in the construction of the Pennsylvania R. R. Mr. Curry has been very successful by his energy and industry, and though he has a competence, he still pursues his vocation.

MRS. C. HEUSNER,—Groceries and Produce, No. 133 Pennsylvania Av., Allegh'y.

This well-known grocery house was established in 1858 with small capital, but gradually increased until it will now compare favorably with any similar establishment in this section of the city. Mrs. Heusner occupies as store and dwelling the spacious three-story brick building 24x65, at No. 133 Pennsylvania Avenue, carrying a full and general assortment of choice family groceries, teas, coffees, sugars, spices, fruits, canned goods, produce, &c., valued at about \$1,500. Her trade is principally local and her annual sales will reach fully \$15,000.

WEST POINT BOILER WORKS,—R Munroe, No. 13 Water St.

The importance of all industrial enterprises contingent upon the iron trade of Pittsburgh can hardly be over-estimated, and among these, occupying a prominent position, the West Point Boiler Works of R. Munroe are deserving of more than brief mention in a work devoted to a proper detailed exhibit of the resources of this city. In 1835, or nearly half a century ago, these works were established by Mr. James Leitch, one of the pioneer mechanicians of this community. Twenty-four years later they passed into the possession of the firm of Watson & Munroe, who carried on the business till 1875, when, by the withdrawal of the senior partner, Col. Munroe assumed sole ownership and has since pursued alone the successful operation of trade.

The plant is located as above, at No. 13 Water street, upon what is known as the "Point," from which the name is derived. It consists of four buildings, of various dimensions, and covers an area of nearly two acres. Here the manufacture of Steam Boilers, Still Tanks, and Sheet Iron Work generally is carried on upon an extensive scale, every possible advantage being secured in the use of the best machinery and improved appliances, including automatic punching machines and rolls, one set of which are 13 feet in length, the motive force being supplied by a 40-horse power steam engine. From 40 to 60 skilled mechanics are engaged upon the work, involving an average outlay of \$100.00 per week, the resultant business amounting to between \$60,000 and \$75,000 annually, and extending all over the United States.

Many improvements have been made in the construction of boilers by this house since its establishment. The location of a man-hole plate immediately beneath the tubes in tubular boilers is an original design with Col. Munroe, and is more perfectly conducive to the thorough cleansing of the boiler than by any other arrangement. The work turned out by this establishment is celebrated for excellent and careful workmanship as well as great durability and strength, the experience of more than twenty years enabling Col. Munroe to select not only the best materials adapted to the construction of the work, but to direct the mechanical operations personally, in such a way as to secure the very best results. In his special line of manufacture Col. Munroe is not surpassed by any of his contemporaries, and for promptness and undoubted reliability has achieved a position that entitles him to no small degree of consideration among those who have fostered and promoted the best interests of Pittsburgh.

PATTERSON BROS.—Livery Stables, &c., 28 Ninth St. and Frankstown Av.

There are two livery stables owned by this firm, one at No. 28 Ninth Street and the other on Frankstown Avenue, between Penn and Station streets, East End, both of which are supplied with new and elegant buggies, carriages, etc. Their horses are noted for their speed and good appearance, while their charges are as reasonable as those of any similar establishment in the city. They attend promptly and efficiently to undertaking in all its branches, and furnish carriages for weddings, concerts and parties on the most moderate terms. The stable at No. 28 Ninth Street is 30x60 feet, and the one in the East End measures 40 feet in width by 75 in depth, giving ample accommodations for the boarding of horses by the day or week. Messrs. Patterson may certainly claim to be thoroughly conversant with their business, they having in 1875 succeeded their father, who had been engaged in the same occupation since 1839. They began business with a capital of about \$2,500, and now value their stock at \$5,000, while the yearly business aggregates about the same amount. Benton Patterson was born in 1842; Edward is two years younger, and both have resided in this city all their lives.

A. P. DAVIS & CO.—General Insurance Agents, 67 Fourth Av.

The Fire Insurance Agency of Major A. P. Davis, doing business under firm name of A. P. Davis and Co., was established in 1872 with the representation of the National Fire Insurance Co. of New York, the Virginia Fire and Marine of Richmond, Va., and the Home Insurance Co. of Columbus, O. A native of New England, Major Davis was educated to the Insurance business in the East before making Pittsburgh his home (having had an experience from his early youth up), and came to this city with a thorough knowledge of underwriting in all its details. During the time intervening since 1872, various additions and changes have been made in the companies represented and he now heads his list with the "Old Connecticut Fire Insurance Co." of Hartford, with assets of one and a half million; also the Northern of New York and other first-class companies enjoying the implicit confidence of the respective managers. Those availing themselves of these advantages can rest assured in having safe and reliable policies in the hands of an upright and reliable business man, who will consult the true interest of policy holders, and that losses will be promptly and justly paid.

THOMAS ROWSWELL,—Livery and Sale Stables, 979 and 981 Penn Av.

Few men in this part of the city are more widely or favorably known than Thomas Rowsell. Mr. Rowsell was born in Perth Amboy, N. J., in 1834. In 1839 his father, now deceased, removed to Pittsburgh, bringing his family with him. Young Thomas learned the trade of a glass blower, at which trade he worked until 1875, (30 years), principally in the employ of Wm. McCully & Co. In 1875 he started in the livery business, the original firm being Rowsell & Griffith. In 1877 Mr. Griffith retired. He does a large livery and undertaking business, to the latter he gives special attention. Mr. Rowsell has always been popular amongst the people of his neighborhood. He represented his ward in the City Council for several years, and was a member of the School Board almost ever since he reached his majority. Good rigs are kept, good horses and reasonable charges.

ACKER & CARR,—Stoves, Ranges, etc., No. 5 Frankstown Av., East End.

Edward Acker began this business in 1871, in 1875 Henry Carr was admitted to partnership. They now do a business of \$8,000. Deal in stoves, ranges and grate fronts, and manufacture all descriptions of tin, copper and sheet iron ware. They also keep on hand oil, lamps, lanterns and house furnishing goods generally. Their speciality is tin-roofing and spouting; both are practical workmen. Mr. Acker was born in Phillipsburg, Beaver county, Pa., June 4, 1841, and came to Ohio in 1857. Mr. Carr is a native of Ireland, and was born in 1845, coming to this city in 1846. Both learned their trade in the city, and possess the confidence of the residents of their locality. Their stock is valued at \$1,000, and they employ two workmen whose salaries aggregate \$80 monthly. The capital upon which this business was originally started, has increased by well-merited success from \$1,000 to \$4,000.

W. H. WILLIAMS,—Commission Merchant, Highland and Penn Av., East End.

Mr. Williams commenced business for himself at the corner of Thirtieth Street and Penn Ave., in 1877. In March 1878, he removed to his present location, which is 20x60 feet in dimensions, where he transacts a general commission business and deals in flour, grain, seeds, millfeed, &c. His original capital was \$600, he now carries a stock of about \$1,500 and his annual sales now amount to \$12,000. Mr. Williams was born at the East End, July 22, 1852, and was formerly teller of the United States Savings Bank of Pittsburgh. He is a gentleman of energy and business tact and stands high in the community in which he resides.

JOHN F. O'MALLY, —Attorney at Law, 91 Grant St.

This gentleman, like many others who have reflected honor upon the land of their birth, as well as that of their adoption, was born in Ireland in 1853, and emigrated to this country in 1867. With that insatiable thirst for knowledge that marks the children of genius, Mr. O'Mally at once entered college in this city, and prosecuted his studies with so much ardor and industry that, after two years, he left the institution with the reputation of large attainments and sound scholarship. Mr. O'Mally experienced the usual vicissitudes of life at this early period of his career, and while the bright future was yet distant and shadowy, chance or fortune determined Mr. O'Mally to artistic pursuits, and he learned the art of lithographic engraving, but of this uncongenial employment he soon grew weary, and now his growing ambition suggested the bar as his proper sphere. He accordingly entered the office of Hon. M. Joseph Gazzam and ex-Congressman Hon. A. G. Cochran as a law student. Under the able tuition of these distinguished practitioners, Mr. O'Mally made rapid progress in his legal studies, and grasped the fundamental principles of legal jurisprudence in a remarkably short time. After a most creditable examination by an able committee that showed him no favor, and he asked none, he was admitted to the practice in the courts of Allegheny County in 1874. Possessing a fine voice and person, a ready and manly eloquence, a graceful elocution and undaunted courage, Mr. O'Mally came to the bar with many personal advantages, besides those that flow directly from the highest culture and unwearied application. He at once took a prominent place at a bar unsurpassed if equalled in our State, and has held that place ever since his admission, undisputed and unchallenged. Mr. O'Mally could not resist the temptation to enter the political arena, and did yeoman service for Horace Greeley in 1872, and supported in 1876 Mr. Tilden with an ability, an eloquence and enthusiasm that made the name of Mr. O'Mally a household word in every district in Western Pennsylvania. He is again willing, at the first trumpet call of his party, to buckle on his armor, and do heroic battle in the cause of his beloved democracy. Mr. O'Mally has a large and lucrative practice in the various courts of the county, as well as in the Supreme Court of the State, and in the United States Courts. Few at his age have attained such eminence in his profession, and he is yet far, as we venture to hope, from the zenith of his fame.

LOGAN, GREGG & CO.—Wholesale Hardware, No. 52 Wood St.

The extensive Hardware establishment of Logan, Gregg and Co. is located at No. 52 Wood St., sign of the mammoth padlock. This house was founded in 1831 by Logan and Kennedy. The firm afterwards became Logan, Wilson and Co., then Logan and Gregg, and in 1867 Logan, Gregg and Co. as at present. They occupy the spacious four-story ware house at the number above given, and carry a large stock of general Hardware and Cutlery, transacting an annual business ranging from \$150,000 to \$175,000, and employing ten clerks and salesmen. Their trade is located principally in Eastern Ohio and Western Pennsylvania, although they have customers in the far West, shipping to Michigan, Utah, Colorado and Nevada. Their specialties are Belting, Mill Supplies and Building Hardware, of which they carry complete lines in great variety. The members of the firm are Mr. Geo. B. Logan, who was born in Allegheny City in 1845, Mr. Edward Gregg, also a native of Allegheny Co., where he was born in 1816, and Mr. T. A. Parke, who was born in West Virginia, but has resided in Pittsburgh since 1863. The business of the house will compare favorably with that of any similar establishment in the West.

WILSON RUNETTE & SONS,—Dry Goods, Cor. 42d and Butler Sts.

It will doubtless astonish many of our "down town" readers, who are not familiar with this section of the city, to learn that the largest and finest Dry Goods salesroom in the city is that of Messrs. Wilson Runette & Sons, located at the corner of 42d and Butler Sts., but that such is an undeniable fact may be verified by a visit to this extensive emporium. The house was established in 1871 by Wilson Runette, Esq., the present Sr. member of the firm, on a comparatively moderate scale. Two sons, A. K. Runette and Jno., were afterwards admitted, when the firm proceeded to erect their present large establishment. Mr. Runette Sr. was born in Ireland in 1819, and came to this country in 1864, embarking in the Dry Goods business three years later in his own name. He possesses all the characteristic enterprise and energy for which the sons of Erin's Isle are noted, and may justly be classed among the enterprising business men of the Smoky City. The two Jr. members of the firm have enjoyed the advantages of a long experience in the business, and are well qualified by nature and education to conduct the business.

J. W. MOORE & CO.—Coach and Wagon Builders, 857 & 859 Liberty St.

The firm of J. W. Moore & Co. was founded in 1867 by the present members, who carried on the business until 1876 at the corner of Washington and Bedford streets, when they purchased the present location of Mr. J. G. Klages, who had been engaged in the same line of business for a number of years. They occupy a three story building 40x100 feet with a yard of the same dimensions, and manufacture wagons, coaches, buggies and every description of vehicles in a very superior style of workmanship. They carry an average stock of about \$10,000 and do a large and flourishing business and put up finest and most reliable work. Mr. J. W. Moore was born in Prussia in 1840, but came to this country with his parents when an infant; he learned the trade of coach and carriage maker; he served with credit and distinction for three years in the Union army during the war of the rebellion as a member of the 4th Penn'a. Cavalry; at the close of the war he returned to his trade and soon after embarked in business in his own name. Mr. C. M. Wise, his partner, was born in Butler county in 1841 and learned his trade there. Both members of the firm are wide awake, enterprising business men. They now employ eleven hands in their establishment and their trade is rapidly increasing.

GEO. WITTMER & CO.—Ice Dealers.

The manufacture of large quantities of beer and other causes have stimulated this branch of business far beyond its former limits. These gentlemen started the business in Etna and now have over 18,000 tons, embracing three ice houses of large dimensions on Harris' Island, near the W. P. Railroad. A patent elevator is used for handling the ice, operated by an engine and boiler of 16-horse power. During the ice harvest they employ 100 hands, in summer about eight. The firm consists of H. & J. Wittmer, both born in Germany; the former in 1823, the latter in 1843. George Wittmer has a farm of 62 acres in Salor township, which he works and where he resides. They also have a grocery in connection with the ice business and keep a general stock.

DAVID HUNTER,—Dealer in Cigars, Tobacco, &c., 351 Butler St.

This establishment is located on Butler St. near Thirty-fifth, where Mr. Hunter commenced business in 1875, now having a good stock of Cigars, Tobacco, etc., and doing a good retail business. Mr. H. was born in Westmoreland this State in 1846, and came to Pittsburgh in 1868. He worked in the Sligo Iron Mills of Lyon, Shorb and Co. for many years, until starting in present business. Mr. H. served 13 months in the Union Army, participating in some severe struggles.

REED & SMITH,—*Seeds and Implements, 137 Liberty St.*

This eminent house if the most prominent as it is the oldest establishment in that line of business in the city, and enjoys a reputation for high character, of which the proprietors have a right to be proud. The house was established in 1866 by the lamented Rev. J. Knox, whose fame as the fruit king of America was as extended as the country. It was an outgrowth of his great and noted establishment, 29 Fifth Avenue, where he began the seed business many years prior to that date, and the growth of the business requiring more room he opened the Liberty Street rooms. It afterwards passed into the hands of his son, W. W. Knox, who after conducting it very successfully for some time sold it to Messrs. Scobie, Reed & Smith, the first two named having been connected with the establishment for some years previously. In 1878 Mr. Scobie retired from the firm and the business passed into the hands of the remaining members, Reed & Smith, who have been conducting it very successfully and with increased energy ever since. It is an establishment deserving more than a passing notice in a work devoted to the industrial and commercial pursuit of Pittsburgh. The business of this establishment is conducted on the highest principles of honor, with great energy and ability and to these facts, together with the genial, courteous manners of the accomplished head of the firm, Mr. J. A. Reed, is due the eminent success it has attained and the prominent position it occupies in the commercial affairs of the city. The establishment is metropolitan in all its features, and a large, varied and complete stock of the best and most popular makes of agricultural and horticultural implements, tools and machinery, of various styles, patterns, sizes, &c., is at all times to be found in their very extensive warerooms. The building occupied being 24 feet front, 112 ft. deep and 5 stories high, and from top to bottom are stored stocks of reapers, mowers, plows, among the latter a large number of the famous South Bend chilled plows, which are rapidly supplanting every other make, and implements and tools in endless variety adapted to all classes of farming or gardening work. Their retail and wholesale seed department is also a special feature of the establishment, to which the closest attention is paid and which is in charge of a very competent, able and experienced seedsman. The reputation of "Kurs Seeds" is not surpassed by that of any other brand in the United States, and their seeds find a market in every State in the Union. They also deal very extensively in artificial manures, handling none but the highest grades and most celebrated brands. The farming interests of Western Pa., East Ohio and West Va., are largely supplied by this house with these manures as well as implements and seeds. The business reaches in the neighborhood of \$75,000 per annum, and is continually widening and increasing. The house is well known and highly appreciated, not alone throughout this and adjoining States, but throughout the entire Union. Mr. John A. Reed, the able head of the firm, was born in Butler Co., Penn'a., in 1845. At a very early age he enlisted in the service of his country as a private in the gallant 101st Pa. Reg't., where by his gallantry he rose to the rank of Lieutenant, although yet a boy. Shortly after the close of the war he entered the present establishment in the capacity of a clerk for the Rev. J. Knox, from whence by his abilities and energy he has risen to the responsible position of the head of the large establishment, and which he has proven himself fully competent to successfully fill and of which he is every way worthy. He is a young gentleman of high character, great energy and extended popularity and ranks high among the business community.

JOHN R. & A. MURDOCH,—*Nurserymen, Florists, &c., 112 Smithfield St.*

There are few houses existing in the United States at this time, engaged in the pursuit of floriculture as a business, that are better or more widely known than that of John R. & A. Murdoch. Established in 1840 by Mr. John Murdoch, Sr., father of the present proprietors, the business was conducted by him for a quarter of a century with marked ability and success, reverting to his sons in 1865, who have still enlarged the business, facilities and reputation of the concern. John R. & A. Murdoch are natives of this city, born respectively 1835 and 1840, having always been connected with their present vocation and identified with the industrial development of the community. The green-houses of the firm are located on Fifth Avenue, 14th Ward, at the East End, and are 17 in number and 65 feet in average length. The nurseries are in the 22nd Ward on Forbes Street, and occupy about one-half of a farm containing 100 acres. The premises in the city are at 112 Smithfield St., opposite the post-office, and consist of one large three story brick building 20x60, with every convenience requisite in the business. The trade of the house is between \$35,000 and \$50,000 annually, the stock maintaining a value of from \$30,000 to \$40,000; 15 to 25 hands being employed in the various departments of the works. The specialty for which the firm is celebrated is "cut flower," and in this line they are perhaps without a rival—having accumulated, regardless of trouble and expense, the rarest and most costly and beautiful, foreign and indigenous flowering plants, vines and shrubs, with a profusion of exotics and tropical growths. In superb floral decorations and designs this firm has never been eclipsed by any western house, a reputation achieved during its extended history and justly merited and deserved through this city and Western Penn'a. John R. & A. Murdoch are well known as being entirely reliable, prompt, energetic and entitled to the confidence of the public in every respect. As pioneers in the vocation of the nurseryman, florist and seedsman, they have done no little to enhance the usefulness of their business, and those at a distance with whom they may have relations can depend with safety upon the representations made or goods sold by John R. & A. Murdoch.

WESTERN EXCHANGE HOTEL, *Ely Wicoff, Proprietor, East Liberty.*

The Western Exchange Hotel at East Liberty, opposite depot, is a four-story building 32x40, conveniently arranged for the purpose, is prepared to accommodate a large number of guests, and stabling for about sixty horses. For Farmers visiting the East End markets, the Western Exchange is general headquarters, and Mr. Ely Wicoff, the proprietor, is deservedly popular. The rooms are neatly and comfortably furnished, the table is first-class in every particular and the rates reduced to popular prices. Mr. Wicoff is a native of New Jersey and was born in 1822. He came to this city in 1850. Twenty years of his life have been spent as a railroad contractor, but since 1865 he has been engaged in the hotel business. He was formerly proprietor of a hotel on the South Side, but in February 1874 he assumed the management of the Western Exchange, where he has built up a flourishing and satisfactory business, doing about \$3,000 to \$5,000 per year.

M. DURKIN,—*Dealer in Coal, Mellon's Building, Station St., East End.*

Among the dealers in this line in the East End, Mr. Durkin is one of the most active. His office is located near the railroad station. Mr. D. has a Coal Mine leased at the head of Lincoln Ave. just beyond the city, and mines the coal he supplies to his customers. The coal is of the best quality and is delivered in good condition and without waste and accumulation of slack. He supplies the East End gas works and other establishments, besides having a large custom among private families of that portion of the city. Besides supplying bituminous Coal from his own mine, he furnishes anthracite Coal of all grades. Mr. Durkin was born in Ireland in 1842, came to this city in 1862, and has been in business on his own account since 1874.

L. HARVEY,—*Books and Stationery, 11 Frankstown Av., East End.*

Those desiring books or stationery should call at the establishment of L. Harvey, where the best varieties of stationery and a fine assortment of books are kept constantly on hand. The establishment was started by L. Harvey & Co., with only \$200 capital in 1860, and became as now 4 years later. The capital now invested is about \$3,000, with annual sales over \$6,000. The building is 13x60 feet in size and is commodious and well arranged. Mr. Leonard Harvey is a native of Germany, born in 1843, and has been in this city since 1850. He began business in East Liberty, previous to which he was engaged in steam boating.

H. H. CLARK, M. D.—*Physician and Surgeon, Butler St.. near Penn Av.*

There is perhaps in no business, or literary avocation, nor indeed in any department of life, a more devoted and faithful class of men than is found in the medical fraternity. It is a professional calling for the highest qualifications of head and heart, the deepest research and most profound study. It carries with it the highest responsibilities that must be borne by its followers. Constant care, laborious and patient study and earnest, enterprising research is exacted of those who have entered the ranks, if they would keep step with the rapid strides that are being made in all its varied and wonderful departments of science and ethics. No broader fields of research are to be found in life than it affords, no higher studies are presented to the consideration of the finite mind, except the study of the infinite, no more intricate and difficult problems are presented to men than those daily coming to the attention and requiring the thought of the medical man. Human distress and suffering, in all their most crushing forms, are daily presented to their view, appealing to their deepest sympathies, and stimulating their greatest energies. Amid the pestilence that "walketh by noonday" they are called to go, and many of the brightest examples of courage and devotion have been recorded of their faithful performance of duty. The world indeed presents to view no class of men who so generally and faithfully are found at their posts of duty in times of danger and distress. Too often, too, are the services of the earnest, patient Physician depreciated and undervalued by those who should feel and manifest the deepest gratitude for services rendered. It is a profession that exacts the practice of the highest principles of honor on the part of its devotees. Life presents no more honorable calling, and affords no better field for developing the noblest qualities of man.

The subject of the present sketch, Dr. H. H. Clark, in the years that he has devoted to his profession, has proven himself eminently worthy of the high calling, and has achieved a success and prominence in the profession that entitles him to more than passing notice in a work setting forth a brief sketch of the men who figure in the history of the day. It is always a pleasure to record the success of men who, unaided, and through difficulties and trials during youth and early manhood, rise superior to all opposition, and surmount the many obstacles continually arising in their onward progress, and achieve a success and prominence in any department of life, and much more so in the walks calling for learning and superior knowledge. Dr. Clark was born in Ireland on July 4, 1844, and the return of each anniversary of American independence comes with added pleasure to him. His parents, who were very poor, emigrated to the United States, with their family, when he was but 3 years of age, his recollections of the scenes of his nativity are therefore very indistinct, while possessing many of the generous frank traits of the Irish character, he is thoroughly American in sentiment. His father dying when he was quite young, he was compelled to earnest effort and labor to aid in the support of his widowed mother, but possessing a noble ambition and desire for knowledge, his evenings were spent at night-school, where he acquired by earnest, faithful application and study the fundamental principles of an education. The self-sacrifice and self-control manifested in such instances can scarcely be appreciated by many, except those who through the same trials have found their way to eminence, but when it is considered that the bright, joyous hours of youth, hours of pleasure and play, the shouts of merry companions must go unheeded, and all be sacrificed to the calls of the noble ambition and lofty aspiration that look beyond the present to the greater and more important events of life, when the sunny hours of youth are passed, will aid the imagination in realizing the strength of will required. The space allotted to a sketch of this kind will not permit of as extended a history of the early struggles and incidents of the doctor, as it would be pleasant to give.

He was employed as errand boy in a prominent business of the city for some time, constantly attending his studies at night. He, after becoming older, secured a clerkship at a moderate salary in a dry goods house on 5th ave., where he remained three years, still pursuing earnestly his studies. He at the end of that time went into the office of Dr. Duncan, and began the study of medicine, but remained there but a short time, going back to his clerkship. Six months later we find him in the office of Dr. Walters, where he earnestly and with his usual energy again began the study of medicine. He remained under the tuition of Dr. W. for four years, and during that time by earnest, close, persistent study laid the foundation for his future success. He afterwards attended the celebrated Bellevue Medical College, graduating from that institution with honor in February 1868. He shortly afterwards began practice in his present location, where he has continued ever since. From the beginning the doctor has met with flattering success in his professional career, and in the 12 years since has gained a very extensive and lucrative practice and accumulated a moderate fortune. The doctor, while being proficient in all departments of medical science, and giving attention to all branches of practice, yet naturally prefers the higher and nobler department of surgery, to which he devotes much study and research, and in which he has attained an eminence seldom acquired at so early an age. His time and talents are largely employed in this branch of his practice, and he has successfully performed some of the most difficult operations that usually come under the skill of the surgeon. He holds the responsible position of Surgeon to the Union Iron Mills, the Lucy Furnaces and the Keystone Bridge Works, and also the position of medical examiner for Travelers Accident Life Insurance Company, and is a leading member of the Allegheny Co. Medical Society. Frank, generous and kind-hearted he has won the affections of all classes, and is respected and honored not alone for his professional attainments, but for the high qualities of a gentleman and upright citizen. His office and residence is on Butler st., near Penn ave., and the street cars pass his door every three minutes.

WM. H. McNARY,—*Hats, Caps, and Gents' Furnishing Goods, 3820 Butler St.*

With a fine stock of latest styles of Hats, Caps and Gents' Furnishing Goods displayed and arranged with the most perfect neatness and greatest taste this enterprising and agreeable gentleman, Mr. McNary, will be found ever ready to greet his many friends and patrons. The business at this point was started in 1875 and since that time has gradually increased. John A. McNary, the son of the proprietor, who is a very agreeable young gentleman, gives his attention also to the business. Mr. McNary was born in Ohio, but has been living in Allegheny Co. for 35 years. He has been engaged in farming for 30 years in Snowdon township, and of course is well and favorably known in that section, as well as in the county at large. He has mingled in the political affairs of the county, exercising a strong influence.

WM. SMITH,—*Real Estate & Insurance Agency, Cor. 47th and Butler Sts.*

Will be found at corner 47th and Butler Sts., where he gives his attention to insuring, renting and selling property, collecting rents, drawing legal documents, etc. Mr. Smith was born in Pittsburgh in 1823, and has lived here ever since; at the age of 22 he married and engaged in grocery business in Lawrenceville, at a time when the 17th Ward was an entire forest—now thickly populated. He continued in that business 21 years; he was the first postmaster appointed in Lawrenceville, being also postmaster again when the office was discontinued. He has held various positions of trust in the Borough, being one of the old settlers.

R. S. MARSLAND,—*Merchant Tailor, Penn & 27th Sts.*

For first class clothing call upon Mr. R. S. Marsland, Cor. Penn and 27th Sts. He is a practical cutter, keeping a full line of piece goods of foreign and domestic manufacture, doing strictly a custom business, employing only first-class assistants and guaranteeing good fits. He is a native of New York City, but has resided in Pittsburgh since 1842, during which time he has been engaged at his trade as a cutter. Eight years ago he started in business for himself and has established a satisfactory trade. Mr. Marsland is a prominent member of the M. E. Church and stands very high in the community.

CHARLES RUNETTE, —Clothing, Hats, Caps, &c., 4304 & 4306 Butler St.

Few establishments in the lower portion of the city, of a similar character, will surpass that of Mr. Runette, between 43d and 44th Sts., on Butler. The business was founded in 1878 by the present proprietor at No. 4304; after six months experience it was found necessary to increase his facilities and he secured the adjoining store at No. 4306. He now occupies both rooms, and also the upper stories with a full and complete stock of fine clothing of his own manufacture, furnishing goods, hats, caps, &c., employing about twenty hands and paying out a large amount of money weekly. The salesrooms are each 22x62, and the value of his stock on hand is not less than \$15,000. He also transacts a large merchant tailoring business. Mr. Runette has been actively engaged in business since boyhood, having been educated to the dry goods business. His emporium of trade is an ornament and a credit to this portion of the city and will compare favorably with any similar establishment in the country. Mr. R. is a young gentleman of great energy, and very agreeable and popular manners, and his many customers visiting his establishment are treated in the most cordial manner. The high natural business qualifications with which he is gifted have in the short period of time placed him in the very front rank of the leading business men of the city.

The successful prosecution of a business enterprise requires a high degree of ability and intelligence, when such is combined with a natural genius for business pursuits. The result will always be as it has been in the case of Mr. R. The knowing how, where and when to buy a stock of goods is an important element in any business. Mr. R. possessing this knowledge in an eminent degree enables him to give to his customers the benefit of his abilities, and to furnish them goods at a greatly less price than other surrounding establishments, and this is one of the great reasons of his success. Such men soon make for themselves a reputation worthy of record among the enterprising and successful men of the day.

R. M. McCLARAN, —Apothecary, Liberty Block, Penn Av., East End.

The leading drug store of the East End is that of Dr. McClaran, located in Liberty Block on Penn Ave. It was established in 1865 by the present proprietor, and for fourteen years has sustained an enviable reputation for accuracy in compounding medicines and putting up physicians' prescriptions, and the purity and excellence of all articles dispensed. Commencing with a capital of \$1,500, Dr. McClaran has now \$5,000 invested in the business, a full line of pure Drugs and Chemicals, Patent Medicines, Perfumery, Toilet Articles, Brushes and Fancy Goods, etc., with the confidence of physicians and citizens of the East End. Dr. McClaran's annual sales will reach about \$10,000. His store-room is 18x60 in size. Dr. McClaran was born in Blairsville, Indiana Co., Penn., in 1840, and came to this city about fifteen years ago. He finished his course of studies in 1859, and first engaged in business at the East End. He is a member of the city council from 19th ward.

GEO. KENNGOTT, —Tin, Copper, Brass & Sheet Iron Ware, Hardware, &c.

Between 35th & 36th Sts.

Among the number of stores and successful businesses in this part of the city the Tin and Hardware of the upright gentleman, Geo. Kenngott, between 35th and 36th sts., on Butler st., occupies a prominent position. Mr. Kenngott began the business at his present place in 1862. He soon extended his business, and now carries a very large and varied stock of goods of all descriptions in his line, and he is able to supply his customers with any article called for at the most reasonable prices. The building, which is owned by Mr. K., is 21 feet front and 76 feet deep. This is one of the oldest establishments of the kind in this part of the city. During his 17 years of business life at this point he has succeeded in accumulating considerable means, and is now the owner of a large amount of property. He was born in Wuertemberg, Germany, in 1836, and came to the United States in 1854. He learned and followed Tinning, working in different establishments until he embarked in business for himself, and in which he has been eminently successful.

ROBERT M. JONES, —Pattern and Model Works, 882 to 888 Penn Av.

The extensive Pattern and Model Works now located at 882 to 888 Penn Avenue, were established about twenty years ago by Mr. Jones; at first in a small way on Mechanic Street. From there he removed to the Atlas Works and from thence to his present location in 1878, where he occupies two buildings, one 35x45 and one 30x30, filled with the best and most approved machinery for the manufacture of models of every description and patterns for castings, &c. He employs twelve skilled and experienced workmen, and supplies many of the large foundries, iron works and machine shops of this city. Mr. Jones is a native of New York City, where he was born in 1821, but came to this city with his parents when but two years of age. In 1836 his father died and since that time he has been the architect of his own fortune and may be cited as one of the self-made men of the Iron city. He originally worked at the trade of cabinet making but subsequently abandoned that business for his present occupation. He worked for a number of years as pattern maker at the Fort Pitt Works; his present works reflect credit upon the business tact, ability and enterprising spirit.

AUG. SCHNEIDER, —Boots, Shoes and Gaiters, Cor. 38th & Butler Sts.

The store of Mr. Schneider is located at the corner of 38th and Butler Sts., where he started in 1870. He now has a large and well stocked store and is doing a prosperous business, giving special attention to custom work. Mr. Schneider was born in Bayonne, Europe, in 1843, came to the United States in 1865, having accumulated some capital engaged in his present business.

G. B. BARKER, —Grocer, Sharpsburg, Pa.

This branch of business cannot be overlooked by any family. This is one of the leading houses of Sharpsburg. It is located at the corner of Canal and Main Sts. Mr. G. B. Barker embarked in this trade here in 1869 with \$3,000 capital; since then he has connected with it the news business, keeping all popular daily and weekly papers, periodicals and magazines, also a choice stock of groceries, provisions, &c., doing a business of about \$4,000 per annum. He occupies a two-story brick building 30x40 feet, known as the "Bee Hive." He has been postmaster here for a number of years; born in England in 1825, came here in 1856.

METZ & REIL, —Drugs, Paints, Oils, etc., Etna, Pa.

No house in Etna is more prominent in this business than that of Messrs. Metz & Reil, who a few years since started in business on their own account, investing about \$1,500. Their store is in a one-story frame building 20x22, in which they carry a stock of about \$2,000. F. M. Metz and J. J. Reil are both young men, the former born in Wayne Co., O., in 1854, and the latter in Sharpsburg, the same year. Taking no prominent part in politics they have industriously confined their energies to building up their business with sure success.

IRON CITY FLOUR MILLS, —Whitmyre, Brungard & Co., 38th St. & A. V. R. R.

The Iron City Flour Mills were established in 1874 by the present proprietors, who removed to this city from Wooster, Ohio, where they had for four years previous been engaged in the same line of business. Their works at the corner of 38th st. and A. V. R. R. are fitted up with all the latest approved machinery, and are as complete as any in the United States. Three large boilers and a 100-horse power engine furnish the motive power, and the mills have a capacity of 200 barrels per diem. The main building is 100x120 feet, and 13 hands are constantly employed, the monthly pay-roll averaging about \$500. They manufacture a superior quality of flour by a patent process, and the reputation of their brands extends through Western Pennsylvania and Eastern Ohio, where their trade is principally located. The firm carries a stock of about \$60,000, and their annual sales reach \$150,000. Their flour is noted for its general excellence, and meets with a ready sale. The members of the firm are gentlemen of experience in the business, and are active, energetic and thoroughly reliable business men. Their mills are a credit to the city, and deserve a prominent position among that class of manufactories in a review of the business interests of Pittsburgh. Mr. David Whitmyre was born in Lawrence Co., Pa., in 1836, from there went to Ohio, when a young man, being raised on a farm, on which he worked until about 25 years of age, when he engaged in the milling business at Wooster, Ohio, afterwards removing to this city. He is a gentleman of high character and respectability. He has charge of the mill as general manager. Jno. Brungard, born in Ohio in 1841, was also raised on a farm. He engaged in Mercantile business for six years at New Middletown, Ohio, from there to Wooster in milling business, and from there to this city. He is the general business financial manager of the mills.

DR. JAMES ROBISON, —Butler St., near 37th.

The popularity, high social position and exalted professional reputation of Dr. Robison has been won by years of devotion and close application to his professional duties, and patient attention to the suffering community. He was born near Morgantown, W. Va., in 1811, received a literary education at Jefferson College, Canonsburg, Pa., being a class-mate of some of the eminent men of the day, as well as some who figured prominently in public life years ago. He graduated from Ohio Medical College in 1841, practiced medicine 3 years in Fayette Co. this State, removing to Lawrenceville, a part of this city, in 1845, a few days prior to the great Pittsburgh fire, enthusiastically entering into the practice of his profession, to which he has continuously and laboriously devoted his closest attention to the present time, and still, though stricken with years and suffering with disease yields to calls. He has been intimately associated with the growth and progress of the wards contiguous to the Allegheny Arsenal. He built his present handsome residence on Butler st. in 1850. During the war he was appointed Surgeon in the army, serving a number of months in the valley of Virginia. Was a volunteer Surgeon in the army of the Potomac after the battles of the seven days, and Malvern Hill rendering efficient service to the Government. For a period of more than 10 years was acting assistant U. S. Surgeon at Allegheny Arsenal, being relieved therefrom in 1876, at which time the office was discontinued. He was one of the originators of the Metropolitan National Bank, and has served continuously in the directory of that institution since its organization, and is a leading member of the Presbyterian Church.

EAST END MARBLE WORKS, —William B. Smith, Highland Av., near Penn Av. East End.

The East End Marble Works were established in March, 1879, by Mr. William B. Smith, the present proprietor, who is a thorough, practical marble cutter, having learned the trade with Mr. James B. Cooper of Perry Co., and mastered the business before starting for himself. He manufactures every description of Monuments, Tombs, Head-Stones, Furniture Tops, Tiles for Floors, Vestibules, &c. He makes a specialty of Mantle work and every description of Marble masonry. Mr. Smith was born in Perry Co., Pa., Oct. 8, 1839, and came to Pittsburgh in 1871. His establishment is located on Highland near Penn ave., offering strong inducements to those interested.

WM. KING, —Alderman and Police Magistrate. —Office, 4508 Butler St.

Mr. King has served the city in his present capacity the four years past to the entire satisfaction of the people, who elected him to the position which he fills with honor. He was Deputy Mayor 2 years of this time, under the administration of W. C. McCarthy, the predecessor to our present Mayor. Mr. King was born in Carlisle, Pa., in 1839, coming to Pittsburgh in 1845, where he has resided ever since. He served 3 years in the famous Hampton Battery, that went to the support of the government from this city during the war. He is a plasterer and stucco worker by trade, at which occupation he has continuously worked up to the time of his election to the position he now fills. He enjoys a high degree of popularity in his ward.

H. BEATTIE, —Groceries and Provisions, 43rd St., bet. 9th & Willow Sts.

Mr. Beattie's grocery store is located on 43rd st. between 9th and Willow sts., where he engaged in the business in 1878; having a good location and enjoying the patronage of the better class, he is doing a good trade. Mr. Beattie was born in Ireland in 1828, came to the United States in 1844, and has worked continuously at his trade of iron moulding, working for the same establishment (Mitchell & Pennock, where he commenced), now Mitchell, Stevenson & Co., all the time, until meeting with a serious accident, disabling him from further work, after which he engaged in his present business.

JAS. P. GREGG, Jr. —Fashionable Hatter, 135 Federal St., Allegheny.

The well-known fashionable Hat House at No. 135 Federal street, Allegheny, was established about twenty-five years ago by Mr. John Boggs, who was succeeded in 1860 by the present proprietor, Mr. James P. Gregg, Jr. He occupies the two-story brick building 12x80 feet, at the location above named with a fine stock of fashionable hats and caps, employing two assistants and transacting an annual business ranging from \$15,000 to \$18,000. Mr. Gregg has enjoyed the reputation of being the leading hatter of Allegheny for nearly twenty years. He was born in Allegheny in 1843 and has been a life-long resident of this city. He is at present a member of Council from the Second Ward.

PETER HUBUCK, —Butter and Eggs, 4312 Butler St.

Located at 4312 Butler st., Mr. Hubuck keeps the best and freshest butter and eggs the market affords, supplying with none but a superior article. Mr. H. engaged in his present business in 1878, and is building up a prosperous trade. He was born in Steubenville, O., in 1848, coming to this city in 1869, working at his trade of boiler maker until engaging in present business.

J. C. O'DONNELL,—*Groceries and Provisions, Cor. Penn Av. and Hazlett St.*

It is always a pleasure to record the success of men who by their individual efforts and own industry rise from the humbler walks of life to prominence in the business or professional world, and the brief sketch of the present subject is given with admiration for the courage, endurance and success attained in the struggles of his life. Mr. J. C. O'Donnell is located on Penn ave., corner Hazlett alley, in the 15th Ward, where he has the most extensive grocery and provision business in this part of the city. He occupies a three-story brick building 31 feet front by 78 feet in depth, and carries a very large, complete and varied stock of groceries, provisions, etc., to the amount of \$10,000 or more, and is doing a business of from \$35,000 to \$50,000 per annum. He started in the grocery business at his present location in 1867 with small capital, which he was enabled to increase rapidly. His business has continued to grow and his popularity to increase. He was born in Butler Co., Pa., in 1833, came to Pittsburgh in 1854 and worked at the puddling furnace in Shoenberger's Iron Mills for a time; he afterwards secured employment in the same capacity with the firm of Reese, Graff & Woods, being the first employee engaged by that firm, when they began business in 1863. He remained with them some years, prudently saving his earnings, which in the course of time amounted to sufficient to enable him to start in his business in a small way, but which has grown into its present very large proportions, under his careful and conscientious management. He is a director of the Metropolitan National Bank of the East End; he has also been a prominent member of City Councils for the past three years; he takes an active and leading interest in all public matters.

UPPERMAN & BRO.—*Livery and Boarding, Penn Av., bet. 33d and 34th Sts.*

These popular stables are located on Penn ave., bet. 33d & 34th sts., where the proprietors embarked in the business in 1878. They carry stock amounting to near \$5,000, and are doing a very prosperous business. They give special attention to Undertaking in all its branches. Their stock is of the best character, and everything about the establishment is kept in the most perfect order. The success and prosperity of the firm are due to the prompt and careful manner in which all business entrusted to their care is attended to, and their upright and honorable dealing. The firm is composed of John and Wm. H. Upberman, both of whom are natives of Pittsburgh, John having been born in 1845, and Wm. H. in 1847, and have lived in this city ever since. John early in life learned the trade of tanning and currying, at which he worked two years, leaving that to embark in the Shoe business. He is now proprietor of the fine and well stocked shoe store at the corner of Penn ave. and 33d st., in which he carries a very complete and choice stock of Boots and Shoes to the amount of \$5,000, and in which he is doing a very large business to the extent of \$12,000 to \$15,000 per annum. He is a prominent member of city councils, in which position he has served the past two years, and wields a large influence. Wm. learned the machinist trade with Reesey & Bro., at which he worked for ten years, accumulating by economy some capital with which he embarked in the livery business near his present location, afterwards entering into partnership with his brother.

O. EILENBERGER,—*The Log Cabin Cigar Store, 1309 Penn. Av.*

The neat, attractive and well stocked Log Cabin Cigar Store is located at No. 1309 Penn ave., where Mr. Eilenberger, the proprietor, began the business with a very small capital, but which has increased greatly, and now he is doing a large and prosperous business to the amount of \$8,000 per annum. He carries a stock to the amount of \$2,000. He employs two hands in manufacturing Cigars. He was born in Germany, in 1843, and came to Pittsburgh in 1849, where he has resided ever since, learning the tobacco business early in life, in this city, saving by economy his own capital to enable him to start for himself. He is a popular young gentleman, a leading member of the National party, and exerts an important influence in the councils of his party.

THOMAS ATCHISON,—*Teamster, Small & 25th St.*

No better illustration of what may be accomplished by honest industry, indomitable pluck and irrepressible energy need be cited than the case of Mr. Thomas Atchison, the well-known and popular teamster of the East End. Commencing business for himself eleven years ago with but one team, he has continued to prosper until he now owns six four-horse teams and transacts a business of which he may justly feel proud. He does a large amount of hauling for several leading manufactories and business houses. Mr. Atchison was born in Ireland in 1816, but has resided in this country since 1833. He worked at teaming for other parties at first, but is now engaged in business for himself with profit and credit to himself.

DR. E. S. HANNA,—*No. 4311 Butler St.*

Dr. Hanna has been in the successful practice of his profession since 1861, coming here from Jefferson Co., Ohio. During the 18 years of professional life in this city, the Dr. has attained an eminent position in the medical profession, and is in the highest standing with the medical fraternity. He has occupied the responsible positions of Surgeon to the Allegheny Co. Workhouse for 9 years, ever since its organization; surgeon to the A. V. R. R. for 10 years; physician to the Church Home Orphan Asylum for 16 years, in which positions the Dr. has rendered services. He is the sufficient father of the inventor of "Leatheroid," a material manufactured from paper by chemical process, forming a substitute for leather (see Leatheroid M'fg. Co. in these pages). The Dr. was born in Steubenville, O., in 1828, studied medicine with Drs. B. Mayers and E. B. Dorsey of that city, graduated with honor at Jefferson Medical College, and began practice in Cincinnati, Ohio, afterwards removing to this city. The Dr. is a cultured gentleman as well as an eminent Physician.

FREDERICK URBACH,—*Saddles and Harness, Etna, Pa.*

Indispensable to a Borough like Etna is the shop of Mr. Urbach. He started in 1871 on \$500; his shop now is a two-story building 36x45 feet; keeps about \$400 worth of work on hand and manufactures saddles, harness or anything in the line to order, as well as doing repairing promptly to order; doing a business of about \$700 per annum. He was born in Germany in 1844, came to this place in 1871; is doing a good business.

HENRY W. OCHSE,—*Oil Cloths, Dry Goods, Notions, etc., Etna, Pa.*

Henry W. Ochse, in the Borough of Etna, dealer in dry goods, notions, oil cloths, gents' furnishing goods, etc., started business several years since on a capital of \$2,000, and now has a trade of about \$7,000 a year, carrying about \$3,000 in stock, occupying a building 20x50 feet; he was born in Etna in 1850 and has resided in the Borough ever since. He is owner of the building he occupies on Butler plank road.

GIRARD HOTEL.—*Charles E. Wolfendale, Prop., 20 & 22 Federal St., Allegheny.*

Visitors desirous of avoiding the smoke and dust of Pittsburgh, and yet being within convenient distance of her business centre, will find at the above named old established Hotel all the comforts of a home and first-class accommodations at moderate prices. This popular house is located on Federal St., only one square from the Suspension Bridge, and two squares from the depots of the Pittsburgh, Ft. Wayne and Chicago R. R., and the West Pa. R. R. It is in convenient proximity to the Exposition Building, and the Coliseum and all the public buildings, places of amusement, and leading business houses of Pittsburgh can be reached by horse cars which pass the door every few minutes. Mr. Chas. E. Wolfendale, the genial and popular proprietor, succeeded Joseph Keating, Esq., in March 1878, and during his occupancy has made many improvements in the house and furnishing of the rooms. He employs one clerk, and his yearly business, which is both transient and local, amounts to from \$12,000 to \$13,000. In connection with the house is a finely stocked bar, where the choicest wines and liquors are kept, and a billiard room fitted up with the most approved style of tables. The culinary department is presided over by first-class cooks, and the apartments and appurtenances of the dining room are first-class. The sleeping apartments, twenty-two in number, are neatly and comfortably furnished, and no efforts are spared by the proprietor or clerks to render the stay of guests pleasant and agreeable. Mr. Wolfendale was born in Allegheny City, Jan. 28, 1848.

NATIONAL PLANING MILL.—*Joseph A. Steen, Nos. 64, 66 and 68 Lacock St., Allegheny.*

The National Planing Mill, Sash, Door and Box Factory of Mr. Joseph A. Steen is said to be the most complete establishment of its kind in this section of the country. The business was established in 1870 by Mullen, Steen & Co. A single building, 40x100 feet, was at that time sufficient for all the requirements of the business. In May, 1873, this building was destroyed by fire, but was at once rebuilt on an enlarged scale, and the works now occupy a substantial three-story brick building, 75x100, supplied with all the modern conveniences and appliances. One 75-horse power engine, with 40-inch boilers and 22-foot flue, is taxed to its utmost capacity to furnish motive power for the machinery constantly in use. Steam elevators, capable of hoisting 2,000 feet of lumber, are employed, and hot air is forced into the dryer by one of Sturtevant's improved blowers, and, in cold weather, heats the entire building. In addition to the manufacture of Sash, Doors, Frames, Mouldings, Stair Rails, Balusters, Newel Posts, &c., Mr. Steen does every description of Turning and Scroll-Sawing to order, and keeps a large stock of rough and dressed Lumber, Shingles, &c., constantly on hand. His business now averages about \$40,000 per annum, and is steadily increasing. He carries at all times a stock of best and most desirable seasoned lumber in various shapes and sizes, and furnishes constant employment to 20 hands, with a monthly pay-roll amounting to \$300, or more. Mr. David Brown is bookkeeper, and attends to the office business. Mr. Steen is a native of this State, and has resided in Allegheny nearly all his life.

TRIMBLE & CO.—*Contractors and Builders, 245 Beaver Av., Allegheny.*

The business now conducted by the above named firm was established in 1861 by Geland, Crawford & Trimble and by them continued until 1867, when they were succeeded by Trimble, McIntire & Co., which firm conducted the business until 1875. Messrs. Wm. F. & John H. Trimble doing business under the firm name of Trimble & Co., occupy the premises No. 245 Beaver avenue, Allegheny city, 150x120 feet. Their factory building is two stories 48x70, of brick with engine house attached, containing one fifty-horse power engine and latest machines. They employ eighteen experienced workmen at a monthly expense of about \$600. They manufacture doors, sash, flooring, siding and mouldings, requiring over 200,000 feet of lumber per annum; they also do scroll sawing of every description to order. They are extensive contractors and builders, and making a specialty of railroad contracts, building station houses, depots, freight houses, &c. Their annual business amounts to over \$50,000. They are both natives of Butler Co., Penn'a., and have resided in Allegheny since 1861.

ALLEGHENY GUN WORKS.—*Jno. Fleeger, 49 Ohio St.*

Mr. Fleeger, proprietor of the Allegheny Gun Works, has carried on the gun-smithing business in Allegheny city since 1831. He occupied a stand on Diamond street for over thirty years and has been in his present location about two years, where he occupies a building 18x27 feet and carries a stock valued at about \$5,000. He manufactures to order sporting and target rifles, and carries a stock of fine English breech and muzzle loading shot guns, revolvers, cartridges and ammunition. Manufacturing and repairing is a speciality. Mr. John Fleeger and his son, William A. Fleeger, are both practical gunsmiths. Fine specimens of his work on exhibition.

S. T. McCLELLAND.—*Fashionable Hatter, 121 Federal St., Allegheny.*

The establishment of Mr. McClelland is headquarters for gentleman's head wear in Allegheny city. It was founded by him in 1868. He occupies a three-story brick building 18x90, desirably located on the Broadway of Allegheny, at No. 121 Federal street. His stock will amount to between \$1,000 and \$5,000 and his yearly sales \$10,000. Mr. McClelland gives his personal attention to the business and employs one assistant. His stock is always fresh and of the latest and most desirable styles. Mr. McClelland enjoys the patronage of the first families of Allegheny and surrounding towns.

BEPLER HOTEL.—*South-West Cor. of Diamond, Allegheny.*

The Bepler Hotel on the south-west corner of the Allegheny Diamond, offers inducement to those desiring comfortable quarters, which can but commend it to the attention of the traveling public. This house was established in July, 1866, by Mr. Adam Bepler and conducted by him until his death, which occurred in March, 1876; now carried on by his heirs. It is a large three-story brick building 40x120; stable accommodation for 115 horses. This house is noted for its comforts and excellent accommodations. The table is supplied at all times with the best the market affords. Mr. C. Geist attends to the office, and is a courteous, affable gentleman. The terms of this house are only one dollar per day to transient guests.

H. FICKEISEN.—*Hats and Furnishing Goods, 299 Beaver Av., Allegheny.*

The leading house in this section of the city for Hats, Caps and Gents' Furnishing Goods is that of Mr. H. Fickeisen, at No. 299 Beaver avenue, where he occupies a brick building 16x140, with a stock of men's and boys' hats, caps and furnishing goods. With small expenses he offers extraordinary inducements to purchasers. He was born in Allegheny in 1852, and has been established in his present line of business for five years.

J. J. FETZER & BRO.—*Groceries, Teas and China Ware, Cor. Butler & Main Sts.*

These gentlemen started their business in 1868 with small capital, which by their ability and energy they have rapidly increased until now they carry a stock of \$5,000 or upwards, and are doing an immense retail business, with their rooms stocked with superior goods. They own and built the large three-story block 36x80 feet, where they are located and the corner room of which is devoted to their growing business, the adjoining room being occupied by a brother in the hardware business. The Messrs. Fetzer are enterprising business men and keep a stock of the best groceries to be found in the city. Those who have occasion to deal with them will always be treated with greatest courtesy and dealt with in the most generous and upright manner. They keep the best class of goods in the line and sell at closest figures, and are enterprising and reliable men. The members of the firm are J. J. Fetzer and C. F. G. Fetzer, both of whom were born in Wurtemberg, Germany, came to the United States in 1848; parents located on a farm, on which Mr. J. J. Fetzer worked for a time, afterwards engaged in the manufacture of blue, by which industries he accumulated some capital which he invested in business of the present firm. C. F. G. Fetzer, after coming to this country was engaged in different commercial houses in this city, acquiring a practical business education, previous to entering into partnership with his brother. These gentlemen are both popular business men.

WM. BAUR.—*Hats, Caps, Gents' Furnishing Goods, 3624 Butler St.*

The courteous, popular and genial gentleman and enterprising young business man, Mr. Wm. Baur, will be found at No. 3624 Butler Street, where in his large and well arranged store room will be found the largest and most complete stock of Hats, Caps and Gents' Furnishing Goods of all the latest styles and patterns and of the finest quality to be found in any establishment in this part of the city. Mr. Baur first opened his store in this part of the city in 1869, with very limited capital and some misgivings as to the success of the enterprise; but by strict attention to business he steadily enlarged and increased his business from the beginning, until now carrying a stock of \$4,000 and upwards and doing a business of from \$10,000 to \$15,000 per annum. Mr. B.'s is now the longest established hat store in this part of the city; during the ten years of his business career here he witnessed seven or eight unsuccessful attempts on the part of others to establish a rival business. Mr. B. is a native of the ward in which he is now doing business, having been born there in 1846, and growing up in it, and seeing it grow up about him. He learned the trade of lithographing and carving when quite young in the establishment of B. Singerly & Co., afterwards relinquishing it to embark in his present business.

EAST END CARRIAGE MANUFACTORY.—*Joseph Grim, Penn Av., near Hiland, East End.*

Some of the finest wagons in use in the two cities are from the well known manufactory of Mr. Joseph Grim, which was established by the firm of Grim & Reese, who were succeeded by the present proprietor in 1877. He has invested a capital of \$1000, and occupies two buildings, one 30x30 and one 30x60, on Penn avenue, near Hiland. The wood-working, black-smithing, painting and trimming departments are each in charge of skilled and competent workmen. His annual trade reaches \$4000 to \$5000, and he gives employment to six hands. Mr. Grim is a native of Beaver Co., Pa., born in 1836, learned his trade as trimmer with Johnson Bros., of Allegheny City, but afterwards removed to New Haven, Ct., where he learned the other branches. He commenced business for himself in this city, and has built up a flourishing trade.

M. L. JENKINS.—*Boots, Shoes, Hats, Caps, etc., Main St., Sharpsburg, Pa.*

Mr. Jenkins was born in Chester Co., West Virginia, January 11, 1855, and came to this city in March 1872; in 1874 he commenced business for himself in Sharpsburg amounting now to about \$12,000. He carries a stock of all styles and varieties of Boots, Shoes, Hats, Caps, Trunks, etc., valued at \$5,000; doing first-class custom work and repairing. His store is 18 by 75 feet, situated on the principal thoroughfare of the town.

FREDERICK C. SCHWARZ.—*Cabinet Maker, 136 Ohio St., Allegheny.*

The picture frame and general cabinet making establishment of Frederick C. Schwarz, is located at No. 136 Ohio street, Allegheny City, in a building 16x82 feet, and three stories in height. Mr. Schwarz began business in 1873 with but \$300 capital, and he has since increased it to from \$3,000 to \$6,000. Believing that investments in the best machinery pays, Mr. Schwarz is supplied with the most approved tools and machinery, among which is a scroll and circular boring machine in one piece. His skill has secured a large trade in the surrounding counties, valued at from \$2,500 to \$3,000 per year, and his stock, which is of a superior character, amounts to about \$2,000 to \$3,500. Mr. Schwarz was born in Germany, August 7, 1826, and came to Allegheny City in 1869, where in 1873 he began his present business. He is president of the Ohio Street Building and Loan Association, and now serving his fourth year.

W. J. SARVER.—*Watches, Clocks and Jewelry, 46 Federal St., Allegheny.*

One of the best known and most reliable jewelry establishments in the two cities, is that of Mr. W. J. Sarver, located at No. 46 Federal street, Allegheny. This house was founded in 1862 by Craft & Sarver with moderate capital. Two years later the firm became Sarver & Brown, and in 1869 Mr. Sarver became sole owner and proprietor. From its very inception the business has steadily increased. Mr. Sarver carries a fine stock of Watches, Clocks and Jewelry of every description, valued at not less than \$6,000 and his yearly trade \$5,000. Mr. Sarver's specialty is fine Howard and Elgin Watches; his sales department is 20x40 feet in size. Particular attention is given to fine watch repairing; he manufactures to order solid goods of every description pertaining to the jewelry line. Mr. Sarver was born in Allegheny City, August 4, 1840.

P. WALTERS, Jr.—*Druggist, 64 Chestnut St., Allegheny.*

Mr. P. Walters, Jr., was born in Pittsburgh, March 21st, 1839, and began business for himself at No. 194 Federal St., Allegheny City, whence he removed to his present place in 1870. This location has been used for many years as a drug store. The increase of Mr. Walters' capital from \$570 to \$15,000 demonstrates his ability, and that his goods have given universal satisfaction. He keeps on hand a stock of drugs and chemicals, together with a full line of white lead, paints, oils and varnishes, valued at \$5,000 to \$7,000, and transacts a yearly business of \$10,000. Mr. Walters employs two salesmen, who are experienced in the compounding of physician's prescriptions, and his customers are distributed throughout the entire county.

A. J. HARBAUGH,—*Granite and Marble Works, Butler, bet. 47 & 48 Sts.*

The Granite and Marble Works of Mr. A. J. Harbaugh on Butler street, between 47th and 48th streets, are among the most extensive and complete in the West. The business was started by Mr. H. in 1860 without capital—but by untiring energy and push he rapidly extended his business, and placed in such a prosperous condition that he now has \$30,000 invested in it and ranks among the leading concerns of the kind in the country. He was the first to introduce the manufacture of granite for monumental work in this city. His works have 310 feet of shop room, being a four story brick building with a very handsome stone front, and is fitted out with all the most approved machinery used in the business. Many of the finest and most noteworthy monuments and statues in Allegheny and adjoining cemeteries in this and other western cities and towns were erected by Mr. H. Among the number as being very remarkable works of art, may be mentioned the sitting statue and pedestal of Daniel O'Neill, a work that ranks with that of the best artists of the old or new world, (Mr. F. Mayer being the sculptor). The McClurg monument, 35 feet high, with large statue; Alex. Speer monument, Cochran monument, Johns' monument, and many others of public note. Mr. Fred. Mayer, the eminent sculptor, employed in this establishment, is an artist of the very highest merit, whose work in all respects is equal to that of any sculptor in the world—Mr. Mayer is a sculptor of rare ability. Mr. Harbaugh in securing the services of Mr. Mayer, has shown his appreciation of art and manifested his enterprising spirit. Mr. Harbaugh was born in Allegheny City in 1831, learned the trade of marble cutting when young, and has followed it ever since. He served in the Union army until the close of the war, in the 155th Pa. Vols.—having left his business to serve his country, which he resumed after returning. Mr. Harbaugh invites the closest inspection; the public are invited to call and see and judge for themselves.

DR. J. H. LEGGE,—*Physician and Surgeon.*

The medical profession is one of the noblest calling, affording unbounded opportunities for the exercise of the highest qualities of heart and intellect, one to which a man may devote the purest aims of life; a profession requiring the most careful preparation and profoundest study and research, such as are also progressive and cultured. Failures of success are attributable to a want of some of these qualifications, sometimes nearly all of them and yet as a rule, true merit will be rewarded with success. The subject of this sketch, Dr. J. H. Legge, is a gentleman of high attainments and professional learning, and an honor to the profession. He was born in England July 13th, 1835, and came to the United States with his parents in 1850. He is descended in a direct line from Sir Thomas Legge, the first earl of Dartmouth, who was the founder of the family in the fourteenth century. This lineage is direct male descent, and he is doubtless the rightful heir to the Willey estate, and earldom of Dartmouth. He graduated the Jefferson Medical College of Philadelphia in 1858, having personally undergone a rigid course of study under an eminent Physician. After graduating he began practice in the city of Wheeling, W. Va., with marked success. He came to Pittsburgh in 1870, where a broader field of usefulness opened to him. His abilities were soon recognized by the medical fraternity and he soon achieved popularity and prominence here. A close student and observer he has always kept pace with the times. Every new discovery meets at his hand prompt investigation, and he is quick to avail himself of everything of merit, and to discard the worthless or obsolete. His rigid adherence to the code of ethics, and his requirements and recognition of the practice of same on the part of his medical brethren, has gained for him the highest respect and confidence.

M. H. HAGER,—*Wall Papers, Oil Cloths, Window Shades, Notions, &c.*

This establishment is located on Butler st. opposite 33th st., where the business was started by C. T. Lauer in 1868, who sold out to Mr. M. H. Hager in 1875. He enlarged the stock and increased the business; he now has a large and fine store room completely stocked with Wall Paper, Shades, Notions, Oil Cloths, Fancy Goods, Parian Marble Statuary, Children's Carriages, etc., etc., having about \$6,000 invested in the stock, and is doing a prosperous local business. He was born in Alsace, France, in 1847, came to the United States in 1852, coming to Pittsburgh 4 years after his arrival in this country. He enlisted when but 14 years of age as drummer-boy in 61st Pa. vols., serving three years in that capacity with his regiment, participating in all the campaigns and hard service of his regiment, without a day off duty. At close of war he returned to Pittsburgh, and worked at various things, until embarking in the grocery business, which he sold out after three years to engage in present business.

HARRIS CRAWFORD,—*Groceries, Frankstown Av., 19th Ward, East End.*

This is one of the best known and most universally patronized grocery stores in the East End. Mr. Crawford was born in the same ward (the 19th) in which he now does business, October 23, 1843, and is therefore well known by all the residents of the East End. He went into business in April, 1871, with a capital of \$1,000, and owing to his large acquaintance and the excellent character of his stock, he has now, including real estate, a capital valued at \$10,000, and his yearly trade is estimated at \$10,000. Mr. Crawford employs two assistants and keeps on hand a regular grocery stock worth \$2,000, besides furnishing Poultry, Game and all kinds of Produce in season. Another feature of his business is, that goods are always delivered promptly and free of charge.

THOS. D. DAVIS, M. D.—*Penn Av., East End.*

Although only a resident of Pittsburgh for the past two years, Dr. Davis is well and favorably known as a skillful physician and surgeon. He was born in Morgantown, Va., 1810, graduated at Jefferson College, Cannonsburg, and studied his profession and graduated at the Jefferson Medical College, Philadelphia, in 1869. The doctor accepted a position on the medical staff of the Philadelphia Hospital immediately after graduating, and remained in that capacity for two years, when he removed to Dayton, Ohio. After practicing in that city for five years, with signal success, on account of impaired health was compelled to seek a climate free from malaria, and he accordingly settled here in November, 1877. Dr. Davis' ability may be measured by the fact that, in his short residence here, he has built up for himself a practice valued at \$3,000 per year.

D. H. METZGAR,—*Surgeon Dentist, Penn & Frankstown Aves., East End.*

The Dental Rooms of Dr. Metzgar are located in the Denison Block, corner of Penn and Frankstown avenues, East End. The Dr. is a gentleman of experience, who has devoted much attention and study to his profession, and who stands high as a competent dentist. He is a native of Westmoreland Co., Pa., and was born in 1840. He removed to this city in 1870, and has practiced his profession here since 1875 with marked success. He studied with Dr. Fisher of his native county, and was admitted to practice in 1865. He attends personally to all his patrons, and all work performed by him is guaranteed. His business now amounts to about \$1500 per annum. Dr. Metzgar possesses many advantages for executing fine work.

FRAUENHEIM & VILSACK,—Iron City Brewery, Liberty Ave., & 34th St.

Had all the Breweries in Pittsburgh, during the past years, manufactured the quality of beer made by the famous Iron City Brewery, the introduction and large sale of the many brands of Western Beer in this market would have been an utter impossibility. Many of them have awakened to the fact, that the poor quality of their goods has been the means of loss of trade, only when they have realized that it has been lost. These facts, however, will ultimately prove a great advantage to the reliable breweries of this city, who have always made good beer, in stimulating their enterprise and efforts to produce an article superior to anything hitherto produced in this or any other city. Notwithstanding the high quality of the beer that has ever been produced by this establishment, their present products are in every respect equal to the finest beer ever sold in this city, and superior to many of the brands of foreign beer that has found a market here.

The high quality of the beer now produced, will not only have the tendency of driving out of this market all foreign brands, but ere long will take the home market of many of the western breweries that are now shipping here. Pittsburgh beer will in the near future be as popular in the West as her iron and glass. It is useless, perhaps, to speak of the folly, not to say the want of public spirit and pride in home industries on the part of dealers and consumers in sending west for beer, when a better article, and we say BETTER without any reservation whatever, can be delivered at their doors fresh from the vaults of our home breweries every morning. Among the many fine establishments in this line in this city are Frauchenheim & Vilsack, Liberty Ave., and 34th Street.

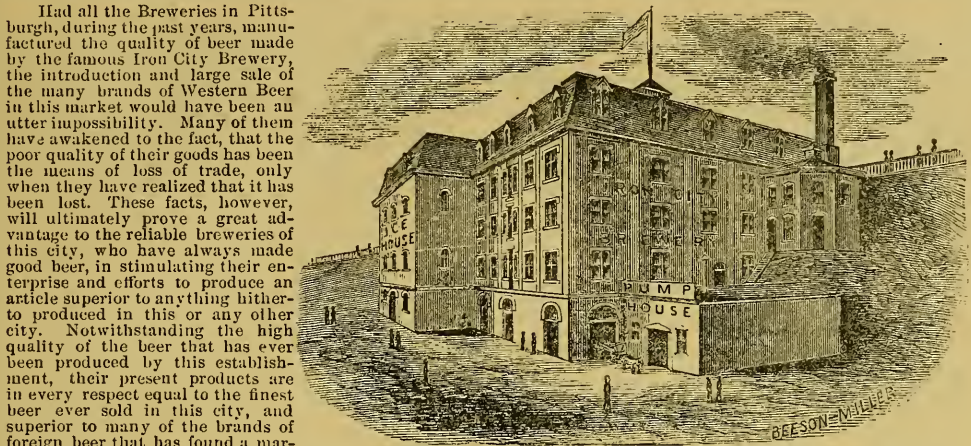
One of the most complete and extensive Beer Breweries in the United States is that now conducted by the above named well known and thoroughly reliable firm, and the reputation of their superior brands of beer extends over Pennsylvania and all the adjoining States. The Iron City Brewery was founded in 1869 by Frauchenheim, Miller & Co., in a comparatively small way at first, near Seventeenth St. They remained in this location for about five years, when they removed to their present site and erected the commodious and well arranged building which they now occupy, 85x100 in size, containing four stories with mansard roof. Three years later they added a three story brick structure, 50x100, in order to better accommodate their steadily increasing trade. These buildings are supplied with all the latest and most approved machinery and appliances required in the business and have a capacity for manufacturing about 50,000 barrels per annum. Twenty-five to thirty skilled and experienced workmen are constantly employed, with a pay roll averaging about \$1,300 per month. They carry an average stock of about 10,000 barrels of Beer and the total valuation of stock, materials, &c., is not less than \$150,000. Their annual sales will compare favorably with any similar establishment in the West, their trade extending through Western and Middle Pennsylvania, Maryland, Ohio and West Virginia. The present members of the firm are Mr. Edward Frauchenheim and Mr. Leopold Vilsack, gentlemen well and favorably known in business circles as honorable, energetic and enterprising representatives of the great industrial interests of the Iron City. Mr. Edward Frauchenheim is a native of Germany. He was born in 1820 and came to the United States in 1842. He was for some time engaged in the grocery business in the ninth ward, Pittsburgh, in partnership with Mr. August Hoevler, afterwards removing to Fifth avenue, where he remained for eleven years. He commenced in business with small capital, but by industry, economy and close application, accumulated considerable means, which he invested in his present business and which has steadily increased until he is now the possessor of a handsome fortune. Mr. Frauchenheim has represented his ward in the city council with credit and ability, and his son, Mr. A. Frauchenheim, who is also connected with this establishment as book keeper, is now councilman elect from the 15th ward. He is a young gentleman of accomplishments, very popular with the people and an honored, respected citizen. Mr. Leopold Vilsack was born in Pittsburgh in 1838. He was, during his boyhood, engaged in working on a farm, but, having an inclination for a more active business career, came to Pittsburgh and learned the trade of brewer at Bennett's Brewery and afterwards associated himself with Mr. Frauchenheim as a partner in the present firm, where he has accumulated a considerable fortune, the result of his own energy and ability. Mr. Miller retiring six years ago and Mr. Hoevler, another partner, having previously died. Mr. Vilsack devotes his personal attention to the general management and supervision of the Brewery, and to his abilities as a maltster and brewer, together with great energy and high business qualification is due much of the popularity of this house. Mr. Frauchenheim attends to the business details and financial department of the establishment. The Iron City Brewery occupies an enviable position among the manufactories of Pittsburgh and has been the means of extending the fame of the city as a great business centre.

E. PRETSHOLD,—Dealer in Tin and Hollow Ware, 53 Chestnut St., Allegheny City.

No. 53 Chestnut street is occupied by the above-named gentleman, manufacturer and dealer in Tin and Hollow Ware. His facilities for manufacturing these articles are unusually large, and being a practical tinner himself. Mr. Pretshold was born in McKeesport in this county, April 25, 1860, coming to this city in 1866, where he learned his trade with the well known firm of Weldon & Kelly. He opened his present establishment in April, 1878, with no capital but \$35. His capital is now \$500, stock \$800, yearly trade \$6,000. He invented a bread pan machine, which is a great convenience and meets general approval.

THOS. FAUST,—Baker & Confectioner, 267 Lacock St., Allegheny.

None are more worthy of mention in this line than Mr. Thos. Faust, at 267 Lacock street, dealer in bread, cakes, candies, nuts, &c. He is well known for the superior quality and freshness of his bread stuffs all over Allegheny City. He commenced business in 1865 with a capital of from \$200 to \$300, which increased to from \$1,000 to \$2,000. At present he keeps a constant stock of \$2,500 and does an annual business of more than \$10,000. His establishment is divided into two departments, viz:—store and bakery. He employs five hands, with an average pay roll of \$25 per week. He is a native of Germany, born June 1837, and came to this city in 1853, where he began business himself twelve years later. He was in the war of the rebellion and served long and well.



Dr. G. T. JACOBY.—*3708 Butler St.*

The medical profession is a calling that exacts the most patient, tiresome and self-sacrificing service, affording opportunities for the exercise of the noblest qualities of head and heart; it requires its followers to be the most enterprising and active men in science and ethics. It has been honored with some of earth's noblest men, exacting also the highest principle of honor. G. T. Jacoby whose office and residence is located at No. 3708 Butler street, is an esteemed member of the profession to which he has devoted the best years and the greatest energies of his life during the past 25 years without the loss of 25 days. During the most of the time the Dr. has been continually pressed with hard service, having at one time a practice extending over 100 square miles. Compelled to go at the call of the suffering night and day; possessing great energy and a robust constitution, he was enabled to endure the hard service for a time, but years and trial warned him that the severe strain of his physical nature would have to be relaxed. He, with great promptness, determined to give up his country practice and remove to the city where he could still devote his time, talents and attainments to the service of his fellow-men in the calling of his choice. He came to Lawrenceville and bought his present fine residence in 1866, since which he has earnestly and laboriously continued practice in which he has been remarkably successful. His attainments as a physician, his earnest devotion to his profession, his enterprising spirit, always leading him to keep fully up and sometimes in advance of the discoveries of scientists. He was born in France in 1828 and came to the United States with his parents when eight years of age. They came direct to this city where they located near the place they have resided ever since. He studied medicine with his father, who practiced many years ago on Fifth Avenue and in Allegheny City, and who is still living, hale and active at a very advanced age, though having retired from active practice with an ample fortune, living in Tarentum, Pa. The Dr. attended and graduated from two prominent medical colleges in this country; he began practice in Tarentum, in 1854, meeting with deserved success from the start, afterwards located at Harnarsville, in Allegheny County, where he continued for many years, during which time he built an excellent practice and reputation, being eminently successful in the treatment of all classes of disease and especially so in diphtheria, at the time it first made its appearance. The Dr. adopted an original treatment which proved eminently successful and which has since been accepted by the medical world as the most successful. During the thirteen years of his residence in Lawrenceville, he has been continuously actively engaged in practice, and gained the very large practice and high reputation as a successful physician, and is largely interested in valuable city property. As a physician he is widely known and has achieved an eminent position in the medical world. He is honored and esteemed as an upright gentleman and worthy and influential citizen. He was surgeon six years to St. Francis Hospital, a position he had to resign on account of the large demands on his time in his private practice.

F. M. HASLETT & CO.—*Keystone Nut & Bolt Works, Cor. Main & Cherry Sts., Al.*

In regard to size and facilities for the prosecution of their business, this firm is particularly fortunate in the selection of their building, which is of an "L" shape, having a frontage of 50 feet on Main street, and extending back 120 feet, where a wing extends at right angles to the main building, a further distance of 120 feet. F. M. Haslett, the projector of the present establishment, was born in Allegheny City, Oct. 2, 1851, and in 1871 commenced his business career with Fahnstock, Haslett & Schwartz. In 1876 he had accumulated sufficient capital to assume the principal control of the business himself, and the firm having extended their facilities and increased their resources, are at present transacting a business throughout the West and South, which is among the largest done by any similar establishment in Western Pennsylvania. They employ a force of 70 men and boys, the monthly pay roll amounting to \$2,500, and use in the prosecution of their business an engine of 60-horse power and boiler of corresponding size.

MRS. S. L. DARRAGH.—*Artist, No. 712 Federal Street, Allegheny City.*

An appreciation of the fine arts is considered to be one of the highest forms of cultivation, and one of the best known among our local artists is the subject of this notice, Mrs. S. L. Darragh. She was born in Baltimore, Md., Nov. 3, 1845, and early evinced a talent for sketching, which, under the guidance of experienced masters, soon ripened into that style, distinguished for correctness of drawing and warmth of coloring, which has won for her a high position among the artists of this city and secured for her work the encomiums, not only of our local connoisseurs, but also of those of the large western cities. Mrs. Darragh particularly excels in portrait painting and drawing. It is worthy of note that although Mrs. Darragh has only been actively engaged in her profession for about six years (having opened her studio to the public in July, 1875), she has secured in the two cities, as well as Cincinnati and Louisville, a large and critical class of patrons among the most prominent citizens.

A. C. SPENGLER.—*Hardware, House Furnishing Goods, etc., Penn Av., East End.*

Mr. Spengler after becoming a thorough workman in his line, established himself in business in 1869, and has built up a trade which is steadily increasing, amounting now to over \$8,000 annually. His store room is 98 feet in depth, with work-shop on the second story. The store is supplied with a general variety of Hardware, Garden Implements, Stoves, Ranges and House Furnishing Goods, together with an assortment of Queensware, Crockery, etc. The variety of articles embraced under each head would make a formidable list in this line. He also does tin-roofing, spouting, etc., having two men employed for that purpose and general jobbing work in tin, sheet iron, etc. Mr. Spengler was born in Jackson, Miss., November 19, 1846, came to Pittsburgh, October 15th, 1864; learned his trade and business in the East End, where he has since been so successful.

TITUS BERGER.—*House and Sign Painter.*

Is located at No. 3811 Butler st. Commenced business in 1871, continuing therein ever since, succeeding in that time in building up a large and prosperous business by his ability, promptness and energy. He does all kinds of plain and fancy painting, frescoing, etc., in the highest style of art, his business extending throughout Allegheny County. Mr. Berger was born in Germany, in 1844, and came to the United States in 1860, coming to this city within one year after. He learned his trade in this city, going to it when 8 years old, continuing at it ever since, a fact that fully accounts for the superior merit of Mr. Berger's work. He was superintendent of the painting department of the Allegheny Valley R. R. Co. for 11 years, in which position he rendered efficient services, and gave very general satisfaction. He resigned his position there in 1871 to embark in his present business, in which he has been eminently successful.

WM. A. GWYNNE.—*Baled Hay & Feed, 503 & 505. Fifth Av.*

The business now conducted by Mr. Gwynne was originally established by Mr. Otsis Hess, who was succeeded by the present proprietor in 1857. He carries a full stock of Oats, Corn, Baled Hay, Chops, Mill Feed, &c., valued at about \$4,000, and has an available capital of \$10,000; annual sales \$5,000. Mr. Gwynne owns the premises and building at Nos. 503 and 505 Fifth Avenue; the latter being a one-story iron clad structure, 40x90, where he offers inducements to purchasers. He was born in Ireland, January 29, 1825, and has resided in Pittsburgh for the past thirty years.

EDWARD SPRING,--Pharmaceutist, 24th St. & Penn Av.

The elegantly arranged and thoroughly stocked Pharmacy, at the corner of 24th street and Penn avenue was established April 1st, 1875, by Mr. Edward Spring, the present proprietor, is a gentleman of long experience and possessing a thorough practical knowledge of the business in all its details and departments. His establishment is desirably located and fitted up in the most tasteful style, and his stock of pure drugs and chemicals, medicines, perfumery, toilet articles, etc., is full and complete. Mr. Spring is a thoroughly educated pharmacist and devotes special attention to the careful preparation of family recipes and physicians prescriptions, enjoying the confidence of the members of the medical fraternity throughout the city. Mr. Spring was born at Stuttgart, Germany, in 1842, and was engaged in the wholesale drug business in the old country. He came to the United States in 1858, and was for a period engaged in the same line of business in Philadelphia. During the war of the rebellion he served for five years in the Union army, as a member of the gallant 21st and 75th Penn'a. Vol's., holding the position of hospital steward from the commencement to the close of the war; after receiving an honorable discharge he re-engaged in the drug business in Philadelphia, where he remained for three years. He then removed to Allegheny City, and for two years carried on the same business, afterward he sold out his interest in that city and removed to his present location, where he is doing a flourishing business and is highly esteemed by all with whom he is thrown in contact, either in a social or business way. He is thoroughly conversant with both the English and German languages.

WM. S. BOSTWICK,--Manganese Bronze Foundry, 33rd St. & A. V. R. R.

These works are located corner 33rd and A. V. R. R. They were started by E. Bostwick, father of present proprietor, in 1870, and at his death, in 1876, passed into the hands of his son. The foundry covers a space of 100x140 feet and is fitted with all the necessary appliances for successfully carrying on the business. Mr. Bostwick is the sole manufacturer of Manganese Bronze Castings; a superior composition being more durable and stronger than brass. He uses in manufacturing about 200,000 lbs. of this composition per annum—his trade extends throughout the West generally. Mr. Bostwick was born in Lansing, Michigan, in 1858; his parents moving to this city when he was quite young. He worked for 10 years in the foundry of his father, acquiring a thorough and practical knowledge of the business. Although quite young, he possesses a degree of energy and business experience well qualifying him to successfully carry on his rapidly increasing business. Mr. Bostwick by his energy and enterprise is rapidly introducing his manufactures throughout the country, and wherever any of his goods are used they meet with the highest commendation and give the greatest satisfaction. He possesses a business ability and energy of a high order and is engaged in an enterprise affording him fine facilities for the exercise of these qualities that are rapidly pushing him to a prominent position among the rising young manufacturers of the city. The composition is being used more and more each year as its qualities of it are becoming known for engines, locomotives, car and rolling mill brasses, etc., and is destined to reach a very extensive use. The greatest promptness is exercised in the execution of all orders entrusted to his hands, which are also gotten up in the very best manner.

EDWARD FOERSTER,--New Wall Paper Store, 94 Federal St., Allegheny.

This store was opened by Mr. Foerster in 1879, and is therefore a new candidate for the patronage of the public. But the business was begun under the most favorable auspices, the entire stock being new and of the latest patterns, and purchased at rates exceptionally low. The business thus far has surpassed the highest expectations of Mr. Foerster. The trade of the house is strictly confined to Wall Paper and Window Shades, but these articles are found in their fullest varieties and numberless attractions. Two obliging gentlemen are employed in this store, and customers are assured of most courteous attention. The trade lies in the city and county. Mr. Foerster was born in Germany in 1824, and came to this city in 1839. He was a most efficient member of the school board for 16 years. In his business his patrons will find him a pleasant gentleman and excellent business man.

T. A. REX, M. D.,--Physician and Surgeon, 377 Fifth Av.

Dr. Rex is a native of Philadelphia, born Feb. 10, 1838. He at first adopted the profession of civil engineer, and in that capacity in 1857, assisted in the construction of the Washington (D. C.), aqueduct in the engineer corps under Capt. M. C. Meigs, U. S. A. He then entered the Philadelphia College of Pharmacy and graduated in 1861 with high honors, subsequently pursued a course of studies at Georgetown Medical College, from which institution he graduated in 1865 and served for eight months as assistant surgeon in the United States Army. He graduated with distinguished honors at the University of Pennsylvania in 1866 and located in Pittsburgh the same year, commencing the practice of his profession. Accomplished scholar, physician and surgeon, he is eminently qualified for his responsible position. His office is 377 Fifth avenue.

SAMUEL SHEFFER,--Grocer, Frankstown Av.. East End.

This well-established grocery house which supplies the wants of a large number of families in the East End and surrounding country, was formerly kept by Mr. Peter Sprague. The present proprietor succeeded to the business in 1877, starting on a capital of about \$1,100. The yearly sales now amount to from \$10,000 to \$12,000. He keeps a general assortment of family groceries, with Flour, Teas, Provisions, Produce, etc., in variety sufficient to supply the usual demand for family use. Mr. S. was born in Wilmore Cambria Co., Pa., March 4, 1844, and came to this city in 1866. He served in Col. Samuel W. Black's regiment during the war of the rebellion, from June 1863, until the surrender at Appomattox Court House, in April 1865.

S. & W. H. MARTIN,--Lumber, Sash, Doors & Blinds, 258 Fifth Av.

These gentlemen have been identified with the lumber trade of the city since 1863, when the concern was started. At their yard may be found a full line of Doors, Sash, Shutters, Moulding and Flooring, as well as building lumber of all kinds. The stock carried being from \$10,000 to \$15,000, while the business of the firm will amount fully to \$30,000 per annum. These gentlemen are well and favorably known. The senior member of the firm was born in Ireland in 1818, came to the United States in 1823, while Mr. W. H. M. was born in Johnstown, Pa., in 1828.

A. McDONOUGH,--Groceries and Liquors, Penn Av. & 30th St.

Prominent in the north-east district is this store, though the proprietor is but 30 years of age. He has been engaged in business five years. Was born in Ireland, came here in 1868; was first employed in Keystone Bridge Co. until 1874. He keeps a good stock and does a good trade. Has invested in some valuable real estate—is courteous and attentive to all.

J. H. CONNELLY & SON, Agents,—Fire Extinguishers, 272 Liberty St.

It will be but a few years before water is entirely superseded by those chemical combinations that were formerly considered so impracticable as a fire extinguisher. The consolidation of all the Fire Extinguishing Companies in the United States, with the purchase of all letters patent pertaining thereto, is the result of Pittsburgh enterprise and capital, and is deserving of more than passing attention. The Consolidated Fire Extinguisher Co. was formed by the establishment of a joint stock company, with a capital of \$350,000, which securing control of the "Babeock" of Chicago, the "Champion" of Louisville, the "Peerless" of Philadelphia and the "Connelly" of Pittsburgh, effected a conjunction of these in one grand central plant, and by the appropriation of the peculiar merits of each are now manufacturing chemical Fire Extinguishers that have been tested hundreds of times with the most perfect success. The officers and directors of the organization are, Major Wm. Frew, Pres't.; Geo. Bingham, Vice Pres't. and Treasurer; B. L. Crawford, Secretary; Chas. M. Martin, General Manager; E. W. Neff, Superintendent; Chas. Lockhart and Dr. J. H. Connelly, Directors; the latter being also resident agent for the company in this city, and the inventor and patentee of the most perfect and valuable Extinguisher in the consolidation. A native of Canonsburg, Penn'a, where he was born in 1818, Dr. Connelly was educated and graduated at Washington and Jefferson College, at his native place, and selecting the profession of medicine, attended the Jefferson Medical College in Philadelphia, receiving his degree and diploma in 1850. For 19 or 20 years thereafter he practiced his profession with marked success in Pennsylvania and West Virginia. The peculiar bent of his mind, however, was directed to chemical and mechanical science, and to the improvement of ancient processes by the application of modern thought. In 1874 with this idea he began to experiment with chemical extinguishers, and in 1875 secured his first patent, many others following subsequently. Not alone in this but in other departments, Dr. Connelly has achieved the reputation of being one of, if not the best practical inventor in this community. As resident agent for the Consolidated Fire Extinguisher Company, he has secured suitable premises at the above location in the Seventh Avenue Hotel, where may be inspected at all times a varied assortment of the faultless machines made by the company, including all sizes, from the convenient hand apparatus to the chemical engine, for city or town use. Such as are regarded as being indispensable in New York, Chicago, and the largest as well as the smallest cities of the country. Sudden in action, prompt in efficacy, and avoiding the spoliation occasioned by the use of water, the machines of the Consolidated Fire Extinguishing Co. must inevitably supplant every other mode now employed for the suppression of fires. Those interested in this matter are cordially commended to J. H. Connelly & Son.

CUSHING & FOX,—Real Estate Brokers, &c., 4318 Butler St.

These gentlemen opened their office in 1875, and have charge of a large amount of property and are doing a good business in renting, insuring, selling foreign exchange, drawing legal papers, etc. They are also agents for a number of foreign steamship lines; doing a general Real Estate, Broker, Insurance and Collecting business. Mr. P. M. Cushing was born in Ireland, came to the United States when about 21 years of age, enlisting in the service of the government at Allegheny Arsenal, and served as clerk in quarter-master's department; at the close of the war he entered the auditor's department of the P., Ft. W. & C. R. R. Leaving these and engaging in business of Steamship Agency with Mr. Bingham; leaving those to embark in present business. Mr. George Fox was born in Germany, in 1824, came to the United States in 1839; worked for 30 years in Allegheny Arsenal, entering the machine shop when a boy, and worked up to the highest grade. After work stopped at the arsenal Mr. Fox was engaged in the grocery business for some years afterwards. He is one of the oldest settlers of Lawrenceville, now 17th ward of the city. Was a member of City Councils for some time, taking an active interest in public affairs.

R. BEITER & CO.—Brush Block Manufacturers, 20th and Mulberry Sts.

The manufacture of Brush Blocks is carried on quite extensively by the above named firm at their factory, corner of 20th and Mulberry sts. The house was established in 1866 by Mr. R. Beiter on Lacock st., Allegheny City, where he had a fine shop. He was burned out during the same year with almost a total loss. Mr. F. S. Barney is now associated with him, and the firm occupies a shop fitted up with improved machinery, which is used by no other establishment in the city, giving unequalled facilities. The trade of this house extends all over the United States, and amounts to not less than \$10,000 to \$15,000 per annum. Mr. R. Beiter is a native of Germany, and was born in 1844. He came to this country at the age of four years. After learning the trade of brushmaker he worked as journeyman for a number of years. Despite repeated misfortunes he has met with success. Mr. Barney formerly resided in Geneva, Ohio, where he was born in 1829, and was engaged in mercantile pursuits until engaging in the present business, and is the inventor of the new machinery now in use at this factory, of which the firm are the exclusive owners, and which is destined to create a revolution in this branch of industry.

JAMES A. SMITH,—Saddlery & Harness, Frankstown Av., 19th Ward, East End.

Mr. James A. Smith was born in this city, January 2, 1821, and learned his trade here. In 1869, with a very modest capital, he began business in the East End, and now employs two assistants and transacts a yearly business of \$1,000 to \$1,500. Mr. Smith's Harness and Saddles are too well known to require any commendation, and his repairing is unexcelled in neatness and strength. He keeps in stock, besides the ordinary harness and saddlery, an assortment of trunks, valises, sacks, etc., valued at \$400, while his trade, located in the 19th, 20th and 21st wards, is rapidly increasing.

EAST END PLANING MILL,—S. Brown, Prop'r, Euclid & Broad Sts., E. Liberty.

This Planing Mill—the only one in East End, was established originally by Messrs. Sill & Negley. In October, 1875, Mr. Samuel Brown became sole proprietor, and he still carries on the business successfully. The capital invested is about \$5,000 and the yearly business amounts to over \$6,000. The main building is 50x100 feet with another 25x80. He employs four machine hands and six bench workmen, with a monthly pay roll averaging \$400. He manufactures Sash, Doors, Shutters, Frames, Mouldings, Brackets, Flooring, Siding and Frame Lumber, and does scroll sawing and turning to order. Mr. Brown was born in Pittsburgh, October 27, 1837, and has been a life-long resident of the city, and is an energetic and enterprising business man. His post office address is "Station A."

CAMPBELL & LAUFFER,—Marble, Granite and Stone, 1725 Carson St.

These workmen and skillful mechanics began business with a moderate capital. A large amount of work is turned out at their shop for the various cemeteries, bespeaking great skill of execution. The shop of Campbell & Lauffer is 20x35 feet, and the yard attached is 120 ft. deep. They employ five hands, with a monthly pay roll of \$200. All work done here for the cemeteries, and it alone forms a large portion of the business, receives special attention at the hands of the proprietors. Messrs. Campbell & Lauffer are natives of Pittsburgh, the former being born here in January 1851, and the latter in December 1858.

J. B. DUNLEVY, —Dental Depot, 132 Third Av.

The wonderful changes effected by modern invention in the useful arts and sciences is nowhere manifested so ably as in the direction of improved dental appliances. The ancient Tourniquet of half a century ago has given place to fine and complicated instruments and even apparatus, that not only relieves the patient from all pain during the most severe operations, but even takes away the knowledge of its progress. To supply the modern dental practitioner with all the varied appliances and materials necessary to the successful pursuit of his vocation, has become an important branch of industry by itself, engaging the labor and attention of thousands of artisans, operatives and dealers in the United States, becoming a source of no inconsiderable revenue. Among those in our own city, Mr. J. B. Dunlevy occupies perhaps the most prominent position both with reference to the extent of his trade, its long establishment and as a manufacturer of gold foil. Originally commenced in 1837, by Thos. Uffington, the business came into the hands of Mr. Dunlevy in 1849, who has since continued it with the most satisfactory success. He is located at No. 132 Third avenue, and in commodious apartments; and the annual trade, which reaches largely throughout the Western and Southern States, being favorable and increasing. Every article known to the trade, from teeth to dental chairs, including all standard works on dentistry, are in stock and can be furnished at the lowest figures; no one in western Penn'a, or perhaps the entire West, has had a more valuable or comprehensive experience in the line of his occupation. As a careful, reliable and prompt business man, with a complete knowledge of every detail, keeping pace with all the advances made in each department of the trade, Mr. Dunlevy can offer inducements that cannot be surpassed west of the Allegheny mountains.

WM. C. BROWN, —Eagle Marble and Granite Works, Butler St., opp. Centre St.

Among the noteworthy Marble and Granite Works in this or neighboring cities is that of Mr. W. C. Brown on Butler st., opp. cemetery gate. The works are well arranged and located, and are fitted with whatever appliances and machinery that is found serviceable in this line of business. Piles of Granite blocks, Marble slabs, &c., scattered about the yards attest the large business done, while neatly displayed are Headstones, Monuments and Memorials of various styles, sizes and prices of the finest workmanship, and of varied materials, from which his patrons are enabled to select. Mr. Brown occupies a leading position in his business, and has erected many of the finer and most noteworthy Headstones, Monuments and Memorials in Allegheny and neighboring cemeteries in this city and the different parts of the country, his fame as a first class artist having extended throughout the adjoining counties and States. Those who are in need of marble or granite work of any description, either for memorial work or building purposes, will find these works able to offer rare inducements, and orders executed with the greatest care and promptness.

Mr. Brown started in business in 1859 with small capital, which he has greatly increased since then by his business ability. He now has thousands of dollars invested in his business, and gives to it his personal attention. He was born in Allegheny city in 1835, learned the trade of marble cutting when quite young, and has worked at it all his life. He was U. S. Assessor during the war, has served his ward in the city councils for a number of years, occupying a leading and influential position in that body. He is a popular, public spirited gentleman, enjoying a high degree of public favor.

J. F. CLULEY, —House & Sign Painter, Dealer in Mixed Paints, etc., 134 Smithfield St.

This well known house was founded in 1850 by Mr. John F. Cluley. He now occupies the entire three floors and basement of the business structure, 20x50, at No. 134 Smithfield street, where he keeps Ready Mixed Paints, Putty, Window Glass, Oils, Turpentine, Varnishes, French Plate, Sheet, Skylight and Floor Glass, and Painters' materials generally. Mr. Cluley does every description of house and ornamental painting and makes a specialty of sign work in all its branches. Many of the most elaborate and elegant specimens of fine sign painting to be found in the two cities are from this establishment. He employs those who are thoroughly acquainted with all the details of the business. The glass signs with metallic backs, manufactured by Mr. Cluley, are models of artistic workmanship in that line, and are not only ornamental but very durable. In banner painting Mr. Cluley has no superior, and in fact he is acknowledged to be at the head of his profession in this city. Mr. Cluley is a native of Pittsburgh, was born in 1828, and has always resided in the city.

MRS. M. L. MOHRHOFF, —Milliner and Dressmaker, 1737 Carson St., S. S.

This well known fashionable establishment was begun by C. F. and M. L. Mohrhoff in 1873. Her present stock of millinery is always varied and in season, and she transacts with her fair customers a business amounting yearly to quite a large sum. The store occupies a large brick building, with a front of 22 feet and a depth of 60 feet. The business of Mrs. Mohrhoff embraces two distinct departments, namely, millinery and dressmaking. Each is well patronized, as her establishment is noted for style and good taste. She employs a number of lady assistants during the busy season. Those who call will find, in addition to Hats, Bonnets, Ribbons and Flowers, a full line of Trimmings, as well as an elegant assortment of Ladies' and Gentlemen's Furnishing Goods, at satisfactory prices.

MRS. C. HAUCH, —Watches, Clocks and Jewelry, No. 295 Fifth Av.

The Jewelry establishment now conducted by Mrs. Catherine Hauch (late Mrs. C. Berger) was founded in 1853 by Mr. Charles F. Berger, without means. He continued the business until his death in 1858, at which time his capital amounted to \$100. Mrs. Berger then assumed the management of the business, and she has now an available capital of \$8000. She occupies the two-story brick building, 22x32, at No. 295 Fifth avenue, with a finely selected stock of Watches, Clocks, Spectacles and Jewelry of every description, valued at about \$5,000, doing a business of over \$1,000 per annum. She employs an assistant at a salary of \$40 per month, and makes a specialty of repairing fine watches, clocks and all kinds of jewelry. She was born in Baden, Germany, Nov. 22, 1833, and came to the United States in 1846, coming direct to Pittsburgh.

JAS. L. WILLIAMS, —Undertaker and Embalmer, 305 Fifth Av.

The first undertaking establishment in Pittsburgh was started in 1845 by Mr. Robert Williams, father of the subject of this notice. He commenced business in this line with a capital of \$4,000 and retired in 1872 with a handsome competence. Mr. James L. Williams succeeded to the business in 1873, commencing with very moderate means. He has now \$6,000 invested in the business and carries a stock of Coffins, Caskets and other articles pertaining to this line valued at about \$2,000, and transacts an annual business of not less than \$15,000, occupies the two story brick building, 41x108, at No. 305 Fifth avenue, and employs two assistants with a monthly pay roll of \$100. His rooms are kept open day and night. He attends to undertaking in all its branches, making a specialty of Embalming bodies by the most approved process. Mr. Williams was born in Pittsburgh, Aug. 22, 1852. He was elected school-director for the 7th ward in 1877, for four years.

DITHRIDGE CHIMNEY CO., (Limited).—*Flint Glass Lamp Chimneys, 17th St. S. S.*

In considering the various industries of Pittsburgh, the Glass trade assumes an importance with reference to the wealth and general prosperity of the community, that commends it to the most careful attention of any work bearing upon the resources of the Iron City. In this connection the Dithridge Chimney Co., (Limited,) from the magnitude of its business and character of its operations would receive fitting consideration. This enterprise was established in 1861 by E. D. Dithridge, Esq., who may be said to have originated the manufacture of Lamp Chimneys, which he began in a very small way at first, but which finally developed into one of the most important interests in the glass trade. The business reverted to the present organization which assumed the shape of a limited stock company, acquiring a charter under a special law, "The Limited Co. Partnership Act" of Pa., re-commencing operations in 1878, from which time its business has steadily and rapidly increased. The plant of the concern is regarded as one of the largest in the city, and consist of numerous substantial buildings, covering in all over one acre and a half, containing 2 large 10 pot furnaces, with packing, grinding and other departments. Here are employed from 150 to 175 skilled workmen, necessitating a weekly disbursement, for labor alone, of about \$1,500. A 20-horse power steam engine and boiler are required to operate the machinery in use, the most careful attention being paid to the perfection of all apparatus connected with the superior finish of the work, new designs being constantly devised, and the highest results obtained in the preparation and manufacture of the material employed. In these two latter respects the company has achieved a wide and permanent celebrity to its wares, finding a ready market not only throughout the United States, but exports in large quantities being made to Cuba, South America and the Sandwich Islands, resulting in a trade that averages from \$175,000 to \$200,000 annually.

The officers of the company are L. M. Plumer, chairman, Wm. Vankirk, Sec'y and Treas. and E. D. Dithridge, Gen'l Supt., gentlemen of extended business experience and thorough knowledge of the requirements of the trade, not only known for their connection with this corporation, but taking an active and influential part in the general interests of the community as officers of various financial, underwriting, benevolent and other institutions. Devoted exclusively to the manufacture of Lamp Chimneys, the Dithridge Chimney Co. (Limited,) occupies a position among its cotemporaries that speaks volumes for the ability and tact with which its business is conducted.

W. C. BERINGER & CO.—*Claim & Patent Agents, 116 Smithfield St.*

The firm of W. C. Beringer & Co. was established in 1871 by the present members, Mr. W. C. Beringer and Mr. William Burris. They give their personal attention to the prosecution of all claims against the government for pensions, back pay, bounties and prize money, having unequalled facilities for transacting business of this description. Mr. Beringer, who has had long experience in the business has charge of the Pittsburgh office, while Mr. Burris resides in Washington and carries on the branch office in that city. Having access to the various departments at the Capitol he possesses advantages which must be appreciated by those having occasion to require the services of these gentlemen. They receive applications from all parts of the country and settle about fifteen hundred claims annually. They have in all cases met with unqualified success and given satisfaction to their clients. Thoroughly informed upon all points of patent law and matters relating to bounties and pensions to soldiers and sailors, they are prepared to give full information to applicants and attend to procuring patents or pensions in the most efficient manner. The firm makes a speciality of the sale of patents of every description, in which line they do a large and lucrative business, with an acquaintance extending throughout the States and territories. They employ at the Pittsburgh office two clerks, whose time is entirely occupied in preparing papers pertaining to their extensive business. Mr. Beringer was born in Allegheny City in 1852 and is a life-long resident here.

F. A. LOHMEYER,—*Fancy Confectionery, Toys, &c., 232 Ohio St., Allegheny.*

This gentleman succeeded Lohmeyer & Bro. in 1879, which firm established the house in 1875. The present stock is estimated at \$3,500, with a yearly trade of about the same amount. Mr. Lohmeyer occupies a very commodious store well adapted to the trade; bakery, confectionery and wholesale and retail store, being the only manufacturer of fancy toys in this city; Christmas toys a speciality. Besides the large trade this house has at home, it has carried its business into various Western States, notably Ohio and West Virginia. Mr. Lohmeyer was born in Allegheny in 1853, and commenced business in 1875. He is amongst our most estimable citizens and successful merchants.

GEORGE EDE,—*Carpets, Oil Cloths, Mattings, &c., 182 Ohio St., Allegheny.*

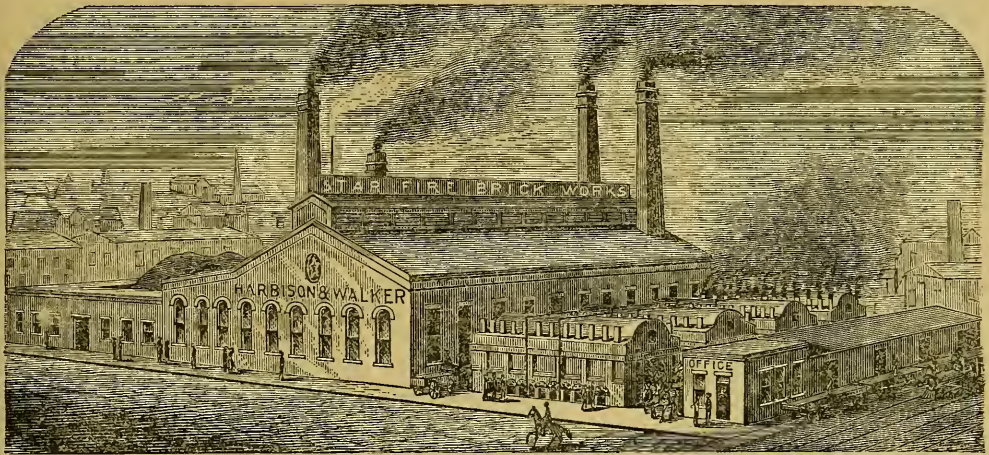
Among the houses dealing in Carpets, Oil Cloths, Mattings, Window Shades, Table Cloths, &c., Mr. George Ede, 182 Ohio street, is one of the best known. Mr. Ede commenced business in 1867 at his present location, with a capital of \$4,500; in the twelve years ensuing he has erected the spacious two-story brick building 17x67 feet, which he at present occupies, and has increased his capital to \$10,000, while his yearly business is valued at \$15,000. Mr. Ede keeps on hand a stock of the most approved patterns of Carpets, Oil Cloths, Mattings, Window Shades, Table Cloths, &c., to the value of \$4,500, and manufactures cottage, list and rag carpets, as well as weaving any desired pattern to order; employing competent skilled weavers. He was born in Germany in July 1840, and came to this city in 1862. With his already widely extended reputation and business, Mr. Ede has reason to count upon fully as gratifying a future.

HORACE R. BASLER.—*Music Publisher and Dealer in Musical Instruments.*

The music establishment of Mr. Basler is located at No. 3712 Butler St., where he started the business in 1877 with small capital, which he has increased, enlarging his stock and extending his trade. He now has a very fine stock of Music, Musical Instruments, and the various things pertaining to his trade in his large and handsome room, and is doing a fair business. Mr. Basler is an accomplished musician, playing on all kinds of instruments, in an expert manner, and composes music with great facility. He was born in New Lisbon, O., in 1855, and came to Pittsburgh in 1860. He worked a number of years in a glass factory, afterwards learned the machinist trade and continued at it for some years, saving his earnings, which he invested in his present business, in which he is meeting with an encouraging degree of success.

G. W. LAND,—*Tin, Copper and Sheet Iron Ware, 139 Beaver Av., Allegheny.*

The manufacture of every description of Tin, Copper and Sheet Iron Ware, Roofing, Guttering and Spouting is carried on at No. 139 Beaver avenue by Mr. G. W. Land, who also deals in Stoves, Grates, Grate Fronts, &c., carrying a stock of about \$500, and transacting an annual business of over \$1200. Mr. Land is a practical tin worker, and attends personally to his business with the assistance of one apprentice. He occupies a three-story frame building, 16x32. Mr. Land is a Pennsylvanian by birth, and an active, energetic business man, with an excellent prospect of ultimately building up a large and important business.



STAR FIRE BRICK WORKS,—Harbison and Walker, 22d & Railroad Sts.

Prominent among the various industries, which make up the general sum total of Pittsburgh's material wealth and general prosperity, may be mentioned the manufacture of fire brick, which is extensively carried on by a number of firms, whose products will aggregate considerably more than half a million dollars per annum. The largest and most extensive house engaged in this line of business in the city is that of Harbison & Walker, proprietors of the celebrated Star Fire Brick Works, corner of twenty-second and Railroad streets. These works were established in 1865 by the "Star Fire Brick Co.," a joint stock company, with a capital of \$16,000, with Mr. S. P. Harbison as manager. In 1875 the present firm was organized and succeeded to the business, and the capital was increased to \$100,000. The main building occupied as manufactory is 96x120 feet, with a stock house, 48x120 feet, and about fifty hands are regularly employed, with a weekly pay-roll averaging \$450. These works are supplied with the most perfect machinery for the purposes required. The clay mills, clay washing machine and calcining kiln are of especial interest, and are undoubtedly the most perfect machines that can be devised for the work. One 18x30 inch cylinder engine and twelve sections of eclipse steam boiler furnish the motive power. This firm carries an average stock of crude and manufactured material of \$16,000 to \$18,000, and transact an annual business of between \$70,000 and \$80,000, with a trade extending all over the United States, from New England to the Mississippi, and from Lake Superior to the Gulf of Mexico. Messrs. Harbison & Walker are patentees and sole manufacturers of an improved tile covering for steam boilers. This is particularly applicable for stationary boilers, and, while it is no more expensive than ordinary covering, possesses many advantages over any other style in use. This tile covering leaves a dead air space between the tile and the boiler, and while it cannot in any way injure the iron of the boiler, it can readily be removed for the purpose of making repairs and replaced without injury to the covering. It is destined ultimately to supersede all other coverings in use. The specialties in fire brick manufactured by this firm are the celebrated Benezet and Clarion Brands, which are unsurpassed as linings for blast furnaces, owing to the highly refractory quality of the stock used, and the process of manufacture. They manufacture every description of Rolling Mill and Furnace Shapes, Boiler Tile, Grate Tile, Stove Linings and specialties for glass manufacturers, locomotives, coke ovens, gas works, iron spiegel, brass and other cupolas. They carry in stock immense quantities of their celebrated Fire Clays, which they can supply at all times, by the barrel or carload. Everything pertaining to this branch of business is either carried in stock or can be manufactured to order at short notice. Mr. Hay Walker is a native of Scotland, born at Haddington in 1816. He came to this country in 1833, and has been for many years identified with various industries in this city. He does not devote his personal attention to these works. His son, Mr. H. Walker, is general manager of the works, and is a gentleman of skill and ability, born at Bokerstown, Pa., in 1840, and has for many years been engaged in this line of business. He devotes his personal attention to the general business and financial management of the establishment.

E. W. SCHMIDT,—Wines, Liquors, Cigars, &c., 3816 Butler St.

The handsome and attractive store of Mr. E. W. Schmidt is located at No. 3816 Butler St. He is very well known to the Pittsburgh public, (especially the business portion) has recently opened his most complete and elegant Liquor House in this city. The main sales room is 18x60 feet in size and fitted up and arranged in an almost faultless manner. The stock embraces all the best and most popular brands of Rye, Wheat, Bourbon and Imported Whiskies, and a full line of Brandies, Wines, Gins, Cigars, &c., both in original packages and in quantities to suit smaller purchasers. Mr. Schmidt was born in Pittsburgh in 1855, he attended the college of Notre Dame, Pa., for 2 years, after which he entered the commercial department of the Iron City College, from which institution he graduated and entered at once the great Liquor House of Schmidt and Friday, (Mr. S. being his uncle) as general book keeper. Here he remained 4 years. On resigning this situation he accepted a position in the city treasurer's office under Col. Kilgore. This clerkship he gave up to enter upon his present business.

Mr. Schmidt carries about \$5,000 worth of stock to which he is steadily adding as his trade increases, and although in business for himself but a few months, his personal popularity and the excellence of his goods have already placed him well on the high way to success.

RUSSELL & THOMAS,—Scrap Iron, Cor. 4th St. & Duquesne Way.

Engaged in one of the most useful industries dependent upon the Iron trade, the well known house of Messrs. Russell & Thomas is gladly mentioned in the "Industries of Pittsburgh." The business was founded by Warren Springer, who was succeeded by the above house within the past few years. Wholesale dealers in Wrought and Cast Scrap Iron, and all kinds of old metal, this house has acquired a trade of from \$75,000 to \$100,000 per annum and rapidly increasing as it extends through Pennsylvania, Ohio and Illinois. The business premises of the concern occupy nearly half a square, six men with teams, &c., being required to handle the wares and attend to the shipment and receipt of metal. Mr. Chas. T. Russell, the junior partner, is a native of this city. Mr. N. M. Thomas, who is both superintendent and manager, was born in Canada, where he was engaged in the manufacturing business, coming to this city in 1874. As a firm they are enterprising and are held in high esteem both socially and commercially.

PITTSBURGH CAR WHEEL WORKS,—*John L. Gill, Jr., Proprietor, Office 83 Wood St.*

Strangers entering Pittsburgh over the Pittsburgh, Ft. Wayne & Chicago Railroad from the West, long before reaching the Union Depot, are impressed with the fact that her manufacturing establishments are conducted upon a grand scale and for miles through Allegheny City the extensive works on the banks of the Ohio are objects of wonder to the traveler. Prominent among the manufacturing establishments that greet the eye are the spacious structures occupied by the Pittsburgh Car Wheel Works of Mr. John L. Gill, Jr. This is the only foundry of its kind in the city and is located on Preble avenue, Allegheny, occupying an area of three and a half acres of ground with commodious and conveniently arranged buildings for carrying on the work in all its departments. This business was established here in 1870 by Mr. John L. Gill, Jr., with his father, who founded the extensive car and car wheel works at Columbus, Ohio. The main building is of brick 60x140 in size, and though but one story is thirty-five feet in height. The machine shop is 35x100 feet with an L of about the same size. About sixty experienced and skilled workmen are regularly employed at this establishment, with a monthly pay-roll aggregating \$2,500. One large 80-horse power engine furnishes the motive power for the extensive machinery which is all of the most approved designs, and combines all the latest improvements. Cold blast charcoal metal is almost exclusively used at this foundry, of which material about 4,800 tons are used annually. The capacity of the works is 45,000 wheels per annum, and the capital invested in the business about \$200,000, and the annual business is correspondingly large. Here are manufactured the very best quality of Palace and Passenger coach, freight car and locomotive truck wheels, and make a speciality of boring and fitting wheels when required. A superior nut tapping machine, patented by Mr. Gill, is manufactured by him, which will tap ten kegs of $\frac{3}{8}$ nuts per day. Mr. Gill has in use for determining the quality of irons used in his works a new and improved testing machine, designed and patented by himself and was built in these works; he is now building similar ones for sale. Mr. John L. Gill, Jr., was born in Columbus, Ohio, and although yet a young man is justly entitled to a prominent position among the representative business men of Pittsburgh, to whose enterprise, ability and sagacity the Iron City is largely indebted for the prominent position she holds as an industrial centre.

E. A. ROSSITER,—*Boston Clothing House, 95 Smithfield St.*

This well known house was established in 1872, in this city, as a branch of the extensive enterprise of Messrs. Jordan, Clark & Co., of Boston. Mr. E. A. Rossiter, who had been associated with the firm for a series of years, having charge of it, under his able management it sprang into immediate popularity. The object of the house, so far as its customers were concerned was briefly, to supply ready-made clothing for men, youths and boys, that should in style fit, and make equal the productions of the best merchant tailors, and to afford a scope in selection not excelled, at prices that should not admit of competition. In these designs it is not too much to assert that the success of the concern was simply unparalleled, and in 1878 Mr. Rossiter became sole proprietor and still conducts the business upon the same fixed policy first inaugurated by himself. The stock offered for selection will average in value from \$12,000 to \$20,000. New styles in cut and material constantly arriving, while the business will range from \$60,000 to \$100,000 per annum. The premises occupied are ample and centrally located, consisting of one large four-story edifice 20x60, filled with every essential for a first-class clothing and furnishing house. Mr. Rossiter is a native of New England, and was born in New Hampshire in 1844; his character is well known as above reproach for integrity and fair dealing, and his enterprise is heartily commended to the public at large.

BYRNE & McCABE,—*Livery & Sale Stables, cor. Butler & 35th Sts.*

The very popular and enterprising young firm of Byrne & McCabe have their extensive and well stocked stables and office on the corner of Butler and 35th streets, where the business was started in 1877, now having \$5,000 invested in stock, etc., and are doing a very prosperous business to the amount of \$9,000 per annum. The success and popularity of these well known stables is due to the fact that they aim to, and are successful in treating patrons in the most liberal and courteous manner—giving satisfaction in every respect—attending to their business with the greatest promptness. Their stock is of the best quality and everything about the establishment denotes an air of business. Mr. P. C. Byrne was born in Pittsburgh in 1854, and is a son of the well known contractor, B. Byrne, Esq.; he has lived in this city ever since his birth. Mr. E. A. McCabe was born in this city in 1848. He first learned the trade of horse shoer, at which he worked for some time. He afterwards embarked in the cigar and tobacco business on Penn avenue, which he afterwards sold out to engage in his present business in connection with Mr. Byrne.

WILLIAM BARKER, Jr.,—*Wool Dealer, 78 Diamond St.*

This is the only house in the city engaged exclusively in the business of buying and selling wool on their own account, and the magnitude of the business may be inferred from the fact that Mr. Barker handles annually from 100,000 to 500,000 lbs. of wool, and his trade extends all over the United States. In addition to being the only exclusively wool house in the city, it is one of the oldest business establishments in Western Pennsylvania, having been founded more than sixty years ago by Mr. William Barker, Sr., uncle of the present proprietor, and during all that period it has enjoyed an enviable reputation. The stock varies with the season and the demand from abroad. Mr. Barker occupies the entire five floors of the spacious brick building 20x40, at No. 78 Diamond street, first door above Smithfield, and during the wool season employs a large number of buyers in various sections of the wool producing regions. He carries a full stock of wool sacks for the convenience of producers. Mr. Barker was born in England in 1834, but came to this country at the age of five years, has resided in Pittsburgh since 1839, and has been for many years identified with the wool trade in this section.

S. M. ROBINSON,—*Photographer, 2 & 4 Sixth St.*

Identified closely with the art industries of Pittsburgh, Mr. Robinson and his work have acquired an enviable celebrity. The business to which Mr. Robinson succeeded entirely in 1876, was founded by Mr. Trevor McClury in 1871, and from 1872 until the time of the succession of the present proprietor was under the style of McClury & Robinson. A native of Massachusetts, Mr. Robinson learned his art under the best photographers in the United States, and has pursued it steadily. As an artist in Photography and crayon portraiture, Mr. Robinson produces work that will compare favorably with the best in the world for swiftness in tone and perfection of finish, evincing as nearly as the heliographic art may, all the charms of true high art. The appointments are perfect to produce flawless results, scenic back-grounds, revolving back grounds, ingenious arrangements for managing the light to accomplish any desired effect; double and solar canvas with all most modern appliances; but this would not be sufficient without the true artistic skill of a practical artist, and in this respect Mr. Robinson has no competitor in the city. Those at a distance who desire portraits and pictures, (or copies of such), that are in themselves eloquent commentaries upon the possibilities of art, should by no means omit an opportunity of visiting the studio of Mr. Robinson; this will give the most perfect idea of what good photography really is.

C. W. BUVINGER, M. D.—*Physician & Surgeon, Butler St., bet. 44th & 45th St.*

Dr. Buvinger is located on Butler street, between 44th and 45th streets, where he has been engaged in the successful practice of Medicine and Surgery since the close of the War, during which time he has accumulated considerable means and established a high reputation as a Physician and Surgeon and an honored and respected citizen. The Doctor was born in York County, Pa., in 1832. His parents removed to Ohio when he was but two years of age, at a time when it was considered the Far West. His parents were poor and early in life he was thrown on his own resources, after having been given such a limited amount of schooling as his father was able to give him. Inspired with a noble ambition and with an undaunted courage, he determined to secure an education and qualify himself for the higher walks of life. The struggles and trials, hopes and discouragements, encountered in his devoted efforts and his final success, are matters of great interest, worthy of record, for the encouragement of young men similarly situated. With a passionate fondness for study, he was compelled to seek such employment as he could secure during the day, giving his nights to study. Teaching country schools, when such were to be obtained, saving and economizing at every point, with a noble self-reliance and independence, to accumulate means to fit him for college and for the study of medicine and attendance at medical college. All these things he accomplished by his own unaided efforts. He secured a literary education at the Ohio Wesleyan University—afterwards studied medicine and entered the University of N. Y.—before graduating yielded to the call of his country and entered the U. S. service as Surgeon of the 8th O. Vol., which served in Gen. Logan's 15th Corps in the Army of Tenn. After the close of the war he graduated with honor from the Long Island Medical College, and came to Pittsburgh, where he married and went into practice. He is still a close student, applying himself to the study of everything pertaining to the profession.

D. W. C. BIDWELL & CO.—*General Agents Dupont Powder Co., 143 Water St.*

The above house, representing one of the oldest and most prominent manufacturing firms in the United States, is justly entitled to particular comment. For thirty years Mr. D. W. C. Bidwell has maintained an unbroken connection with the Dupont Powder Co. as resident agent in this city. The celebrity of their manufacture is not confined to America—it finds a market wherever the commerce of this country extends, and is esteemed as the best powder in the world for explosive force, purity, and uniformity of strength. Great advantages are derived in safety and cost of transportation over other brands from the fact that Dupont's gunpowder is packed in patent iron kegs, thus making it impervious to moisture and materially lessening liability to accidents by fire, leakage or in handling. The demand for this article has continually increased since its first introduction, the business having grown to such an extent as to require two magazines in the environs of this city capable of storing 8,000 kegs each, and the establishment of numerous agencies in Western Pennsylvania and adjacent States, all supplied with smaller magazines. With such facilities the importance and extent of the business in this section is a matter readily accounted for, its increase being limited only by the natural fluctuations in the development of our resources.

G. S. BATES—*Fire Insurance and Real Estate Agency, 4510 Butler St.*

The Fire Insurance and Real Estate Office of Mr. Bates is located at No. 4510 Butler street, where he commenced the business in 1862, continuing therein to the present time, where he is doing a large and prosperous business in Insuring, Renting and Collecting. Mr. Bates was born in Connecticut in 1808, came to Pittsburgh in 1826, and engaged in the iron working business. Shortly afterwards he secured employment in the U. S. Arsenal, where he continued to work for 23 years—after which he opened his Real Estate and Insurance Office. Mr. B. is one of the oldest settlers now living in Lawrenceville, now the 15th and 17th Wards. He remembers when that part of the city (now densely populated) was a native forest, and he has witnessed the building of the greater portion of that handsome portion of the city. Mr. B. was elected and served three successive terms to the office of Burgess of the old borough of Lawrenceville and has filled many other positions of public trust.

MRS. E. J. BOEHME & SON—*Watchmakers & Jewelers, 4124 Butler St.*

The fine retailing establishment of the above firm is located at No. 4124 Butler street, where the business was started in 1865 by E. J. Boehme, Esq. At his death in 1871, his widow, Mrs. E. J. B., and her son, Geo. E. Boehme, continued the business under the firm name of Mrs. E. J. Boehme & Son. Their large and handsomely fitted storeroom, 20x45 feet in size, is completely stocked with an elegant assortment of Clocks, Watches, Fine Jewelry, etc. They carry about \$5,000 worth of stock, and do a large and paying local business. Geo. E. Boehme, the manager of the business, was born in Germany, and came to the United States when he was 14 years old. He grew up in the watchmaking and jewelry business of his father, thereby acquiring a thorough and practical knowledge of the business in all its various details.

H. F. BLEIL—*Dry Goods, Groceries, etc., Etna.*

Suburban towns, like Etna, command a country as well as city trade, and therefore a variety is essential. This store was established by F. Bleil in 1851, succeeded by H. F. Bleil in 1876. He is located on Butler Plank Road, and keeps Dry Goods, Groceries, Hardware, Queensware, Flour, Feed, Hay, etc. He carries a stock of about \$2,500 and does a business of about \$12,000 per annum in his storeroom, which is 20x10 feet in size, doing a good trade. He was born in this place in 1849, was elected councilman of the borough in February last.

P. BYRNE—*Groceries and Provisions, 25th St. and Penn Av.*

The Grocery and Provision Store of Mr. Byrne is at No. 899 Penn avenue, corner of 25th street. He has a complete stock of Groceries and Provisions of all kinds and does a flourishing business. His store is 25x50 feet in size and is noted for variety and excellence of goods. He was born in Ireland in 1841, came to this country at the age of five years. He learned the trade of currier and worked at it for a number of years. He exerts a strong influence in the district and ward.

E. OFFORD—*Hardware, Tinware, &c., Butler St., bet. 35th & 36th.*

Among the leading houses in this line is that of E. Offord, dealer in Hardware and manufacturer of Tin, Copper and Sheet Iron ware. He began business in 1873, coming here from Brownsville, Pa., where he had carried on business before, his room is 60 feet deep and well stocked with Hardware stores and Tinware. Keeping desirable goods and selling at low figures he has worked up a good established trade to which he gives close attention. He was born in Brownsville, Pa., in 1844, coming here in 1873. He has an enviable reputation which he has merited.

A. GUCKENHEIMER & BROS.—*Copper Distilled Pure Rye Whiskies, 93 & 95 First Ar.*

The world renowned distillers of the celebrated brands of "Guckenheimer's Pure Rye Whiskies," have their headquarters in Pittsburgh, and although their distilleries are located in another county, they are entitled to a prominent position in a work of this description among the representative business houses of Pittsburgh. Their principal offices and warerooms are located in the spacious double structures at Nos. 93 and 95 First avenue. This house stands preeminently at the head of all similar establishments in the country, and we are enabled to furnish our readers with a brief sketch of the extensive buildings occupied by them. The individual members of the firm are A. Guckenheimer, S. Wertheimer, E. Wertheimer and I. Wertheimer, and for more than twenty years under the same style the business has been successfully conducted. Their distilleries are located at Freeport, Armstrong county, Penn'a., and cover many acres of ground on the line of the West Penn. railroad, whose tracks intersect the premises, which have an extended frontage on the Allegheny River. The distillery, proper, is a two-story brick building 363x180 feet, and a two-story frame structure 34x98 feet; both supplied with the most approved machinery and appurtenances. Their main warehouse is a mammoth four-story brick edifice 70x305 feet, with stone foundations of extra width and solidity, especially constructed to sustain the immense weight when filled to its utmost capacity, which is 25,000 barrels of whiskey. All the walls and timbers are of the heaviest description. This building is one of the most substantial and complete as well as the largest distillery warehouse in the country. Another three-story brick building for the same purpose and with a capacity for storing 6,000 barrels of whiskey is 84x52 feet and both warehouses are heated by steam. This firm manufacture their own malt exclusively, and their malt house is a four-story brick building 58x110 feet in size, supplied with a kiln thirty feet square. Their grain warehouses are also of mammoth proportions, one being a one-story frame building with stone foundation 30x150 feet in size with a storage capacity of 20,000 bushels of grain, and another one-story frame building likewise with stone foundation 65x22 feet, with a capacity for storing 8,000 bushels of grain, of which article the firm always carries an immense stock on hand of the best grades. Their storage room for empty barrels is obtained in a two-story frame building 45x34, and their cooper shop is a two-story frame structure, with stone foundation 40x100 feet in size. The firm manufactures every package used in their business from the best Indiana oak staves. The barrels are all hand made by the most experienced workmen and bound by extra heavy hoop iron. In connection with their cooperage department are extensive sheds for seasoning and storing material, where the staves are kept for three years before they are ready for use. The business offices are models of comfort and elegance, and are situated in a beautiful one-story brick structure 40x25, finished in the most elaborate style of art in hard wood with desks and furniture to correspond. The guards above the desks are of magnificent French plate glass, ornamented with monograms of the firm. They are supplied with gas and steam heating apparatus and carpeted with Linoleum and elegant Brussels carpet. The fire and burglar proof vault is made with stone floor and head six inches thick, over 30,000 bricks and fifteen barrels of cement were used in its construction. Forty-eight experienced hands are constantly employed at these works with a monthly pay-roll aggregating \$3,100. One sixty-horse power and one forty-horse power engine are required at this establishment and six large boilers, four of which are four flued, 24 feet in length and 42 inches in diameter, and the other two are two flued 26 feet in length and 40 inches in diameter. From this cursory view of the capacity of this house it will not appear strange to our readers that their whiskies can be found in every section of the United States, if not in every quarter of the globe. Mr. I. Wertheimer presides over the Freeport office and gives his personal attention to the clerical force there employed. Mr. E. Wertheimer occupies the responsible position of President of the First National Bank of Freeport, and exercises a general supervision over the distillery and its manifold departments. The trade in the larger cities of the West is ably attended to by Mr. S. Wertheimer, while the senior member of the firm, Mr. A. Guckenheimer, attends to the general business of the firm at the home office in this city. Mr. A. A. Solomon, an experienced and accomplished gentleman, has offices at No. 34 Broadway N. Y. and at No. 121 Walnut street, Philadelphia, from which he attends to the wants of consumers in these cities and represents the interests of the house throughout the Eastern States. By the admirable arrangements thus noticed each member of the firm has his regularly allotted department and every detail of the business is under the immediate supervision of one of the parties most interested.

IHMSEN GLASS CO. (Limited).—*Colored Glassware, Cor. 14th & Neville Sts., S. S.*

The yearly increasing demand for glass jars and bottles for various commercial uses, as well as the preservation of fruit, malt liquors, etc., has given an impetus to the glass trade in Pittsburgh that is without a parallel and has led to a largely increased production in this class of goods. The Ihmsen Glass Co. (limited), was organized and incorporated in 1878, with a capital stock of \$22,000, having a special view to the manufacture of wares in this line, an object which has been most successfully attained. The plant of the Company is an extensive one. It covers an area of about two acres and is fully supplied with every appliance and mechanical device that leads to the perfection and finish of the product. Some 80 men and boys are employed at these works, requiring an aggregate weekly disbursement of about \$2,500, resulting in a trade that extends over the West, North and South-west, through which territory they are represented by traveling salesmen and established local agents. The officers of the company are Jacob Hahn, Esq., President, and C. Ihmsen, Jr., Secretary and Treasurer, both of whom are well and widely known to the business community, the name Ihmsen being almost historically connected with the growth and development of the glass trade in this city. Both these gentlemen are natives of Pittsburgh and have long been connected with its manufacturing interests. The manner in which the operations are conducted under their supervision speaks in the highest terms of the knowledge, experience and ability which they bring to the work, making the Company not only highly successful in the ordinary business acceptance, but placing it in a position, through an honorable and liberal policy, that entitles it to the respect of the trade and the consideration of the public.

A. M. FETZER,—*Manufacturer and Dealer in House Furnishing Goods, etc.*

The fine establishment of Mr. Fetzer is located on Butler st., near 42nd st., near which place he started in the business in 1868, with very small capital, which by close attention to business he rapidly increased, enlarging his stock and extending his business, afterwards removing to his present large and fine store room, 20x60 feet in size, which is well stocked with a good assortment of all the various goods in his line, and in rear of which he carries on the manufacture of Tin, Sheet Iron and Copper Ware of all kinds. He is now doing a large and prosperous business, which he has built up by his own enterprise and ability. He was born in Germany in 1840, and came to the United States when 7 years of age. He served 9 months in the 106th Pa. Vol. during the war.

E. MYRICK,—*Hardware, Farm Implements, &c., Main St., Sharpsburg.*

Mr. E. Myrick on Main street, Sharpsburg, has a fine business in general Hardware, Farm Machinery, &c., which attracts a large country trade, he also keeps Cutlery, Paints, Oils, Glass, Putty, Sportsman's supplies, Seeds, &c., embracing a large and attractive stock. He was born in New York State and came here in 1873, subsequently locating in Sharpsburg. He is a man of extensive knowledge and business qualification. Doing business on a cash basis he makes no bad debts and gives close figures in all branches of his business. He occupies a two story brick building, 30x95 feet, and enjoys a flourishing trade.

CHAS. H. KELLY & CO.—*Sewing Machine Attachments, 6 & 8 Sixth St.*

As an industry contingent upon the manufacture and trade in Sewing Machines, the firm of Chas. H. Kelly & Co. occupy an important and useful position. Both members of the concern, Chas. H. Kelly and A. F. Allewelt, are natives of Penn'a., the former from Lancaster and the latter from Hanover. Educated as practical machinists, expert in the higher branches of their avocation, they came to this city in 1872, and in 1874 starting with a very limited capital in cash, but considerable backing in the way of business and mechanical talent, which on the basis of the first years trade has increased 200 per cent. and is still growing rapidly, with a stock at this time of \$10,000 and an annual revenue of about \$30,000. Manufacturing and dealing in all kinds of Sewing Machine Attachments, extra finished needles, oil, parts, belts, screws, &c., and giving particular attention to re-building, repairing and re-japaning sewing machines; the firm is also engaged in the manufacture of the Singer Machine since the expiring of the patents. With a trade extending over Western Penn'a. and the adjacent states, the house of Chas. H. Kelly & Co. are not only well known abroad, but highly esteemed at home.

HENRY APPEL,—*Boots, Shoes & Fine Gaiters, 4303 Butler St.*

The handsome and elegantly stocked shoe store of Mr. Appel is located at No. 4303 Butler street, in Klopfer's block, 25 feet front and 50 feet deep. The stock carried amounts to \$5,000 or upwards, of Boots, Shoes, etc.; he is not excelled by that of any establishment in the city. Mr. Appel has a thorough and extensive knowledge of the Boot and Shoe trade, to which he gives his close study, enabling him to offer to his patrons a very superior class of goods of the latest styles, making his the leading house in this line in this part of the city. His own manufacture of Boots & Shoes, to which special attention is given, ranks as the best goods of that kind; and his custom work has a very high reputation. He also does repairing to order. Mr. A. was born in Germany in 1840, came to the United States in 1860. Learning the trade in this city, he afterwards entered the establishment of J. H. Borland & Co., where he remained a number of years. In 1869 he opened his present business, at first in a small way, which his energy and ability has rapidly built up until the present, where he is doing a business of \$15,000 or upwards per annum, and enjoying popular favor.

LAWRENCE BANK.—

This very flourishing institution was originally organized in 1865, under the name of the Lawrence Savings Bank of Lawrenceville. In 1877 a stock company was formed, with a capital of \$80,000, adopting the name of The Lawrence Bank. It has been managed with signal ability, caution and foresight. W. W. Young, the President, was born in Pittsburgh, in 1832, and has been prominently connected with the leading industries of the city for many years. He also represents his ward in the city councils. John Herr, the cashier, is also a native of this city, born in 1837. Mr. Herr entered the 78th Regiment P. V. at the commencement of our civil war, and served with credit to its close. Upon returning to Pittsburgh he entered mercantile life, with which he is still associated. This bank has been exceptionally fortunate in the choice of its officers. Mr. Young was born here of parents of high social position, his father being among the most successful and respected merchants of earlier days. All those who have dealings with this bank will find its officers courteous and obliging within the scope of business comity.

T. R. EVANS, M. D.—*Physician and Surgeon, cor. of Butler and 38th Sts.*

Dr. Thos. R. Evans, the modest and accomplished subject of this sketch, is located at the corner of Butler and 38th sts., where he began the practice of medicine in 1875, being associated with his uncle, the well known and eminent physician, Dr. Jas. Robinson, whose large and extended practice required the aid of an able assistant, since which time Dr. Evans has been attentively and closely applying himself to his profession, relieving his uncle from much of his former labor, and winning many friends by his genial and courteous manner, and extending and enlarging his practice by his ability and accomplishments as physician, surgeon and gentleman. The doctor maintains the highest standing among the medical fraternity by his attainments and courtesy. He was born in Bedford Co., Pa., in 1843, received a literary education at the State Normal School, studied medicine with the eminent physician and surgeon, Dr. Saml. T. Davis, of Lancaster, Pa., attended the University of Michigan, graduated with honor from the medical department of that institution in 1873, entered the practice of medicine in the State of Indiana, where he remained in successful practice, coming from thence to relieve and assist his uncle. Since his location in this part of the city, Dr. Evans has won the respect and confidence of the entire community by his honorable and gentlemanly deportment, and high attainments as a physician.

FERGUSON & CO.—*Book and Job Printers, No. 159 Smithfield St.*

Mercantile printing in all its varieties is the specialty for which the house of Ferguson & Co., No. 159 Smithfield st., is noted. The firm commenced business in 1877, although Mr. Ferguson had been engaged for seven years previously in the same line of business, as a member of the firm of Davis & Co. They transact a general Book and Job Printing business, turning out some admirable specimens of artistic typography. Two sons of Mr. Ferguson are associated with him as the "Co.," both of whom are practical printers, and give their personal attention to the business. Two additional hands are also constantly employed, and two job presses of the latest design and modern improvements. Their business, which will amount to not less than \$5,000 per annum, will compare favorably with that of any similar establishment in the city. Their card work, circulars and letter heads are models in their way, and cannot be excelled. Mr. R. S. Ferguson was born in Westmoreland Co., Pa., in 1833, came to Pittsburgh in 1849, and learned the trade of printer here. His two sons and partners, Mr. W. A. and Mr. S. H. Ferguson, are still young men, and were born in Pittsburgh.

W. F. EICHENLAUB,—*Furniture Warerooms, 3505 Butler St.*

The large Furniture establishment of Mr. Eichenlaub is located at No. 3505 Butler st., where his handsome store-room, 20x60 feet in size, 2 stories high, is crowded full of fine furniture of every description, which is sold at the lowest city prices. The establishment is recognized as the leading furniture house of the East End, and is of course doing a very large and prosperous business. Mr. Eichenlaub carries a stock to the amount of \$70,000 to \$100,000. The business was started by Frank Eichenlaub, with small capital, and came into the possession of the present proprietor in 1874. Since then he has greatly enlarged and increased his stock and extended his trade. Selling at closest figures, he is patronized by the most appreciative buyers. Mr. Eichenlaub was born in Butler Co., Pa., in 1851. He came to Pittsburgh in 1867, learned the trade of wood-turner in the establishment of Seibert & Co., and after completing the trade he embarked in the furniture business, in which he has been quite successful.

W. DOUGLASS & SONS—*Steam Boilers & Sheet Iron Work, 39 & 41 Carson St., S.S.*

In 1833, now nearly half a century ago, the senior partner of the above firm, Mr. W. Douglass, established the business to which his sons, James L. and John, were admitted in 1869, under the existing style. A native of Washington County, Pa., Mr. Douglass was born in 1811, and, as will be observed, began active operations on his own account upon arriving at the age of twenty-two. His means were limited and the inception of his career was checked by many reverses and difficulties; still, with undaunted resolution and a natural talent for his vocation, he worked on, gradually overcoming every disaster, and, with native perseverance, finally placing his enterprise upon a solid and enduring foundation. The plant of the firm is now located at Nos. 39 and 41 Carson street, South Side, covering an area of 100x200 feet and possessing facilities that are of marked value. The annual business transacted at present prices is about \$50,000, and from 25 to 28 hands employed, many of whom are skillful artificers, at a cost to the firm of \$350 semi-monthly. The machinery with which the works are equipped is operated by a 20-horse power steam engine, and the class of work executed embracing the construction of Steam Boilers, Tanks, Stills, Evaporating Pans, and all kinds of Sheet Iron Work, special attention being given to Boat Building, contracts made for the Construction of Boats, Tugs, Tow Boats, Propellers and every grade of steam craft. The work of this house is celebrated for its excellence, orders being filled from all parts of the United States. In the manufacture of Douglass & Brown's Patent Upright Boiler, the firm have an exclusive monopoly, and, without describing the principles of this boiler in detail, it may be said that the firm guarantee it to be more safe, simple, durable and economical, and to make more steam than any two-flue boiler of the same diameter. In substantiation of this statement Messrs. Douglass & Sons refer to the firm of Brown, Bonnell & Co., Youngstown, Ohio, and the Monongahela Incline Plane Co., of this city. In conclusion it is but just to say, that among the many manufacturing concerns of this city and surroundings, none have achieved a reputation and standing more desirable than Messrs. W. Douglass & Sons.

FREDERICK ANDRIESEN,—*Wines & Liquors, 40 & 42 Ohio St., Allegh.*

Among the Wholesale Liquor houses of Pittsburgh and Allegheny no one stands higher or enjoys a more enviable reputation than that of Mr. Frederick Andriessen, at Nos. 40 and 42 Ohio street. This house was established in 1862 by the present proprietor, and since that time has enjoyed a liberal patronage. He keeps only the purest articles and sells them at the most reasonable prices. His stock comprises pure old Rye and Bourbon Whiskies, French Brandies, Holland Gins, Port, Sherry, Rhine and California Wines, and imported Ales and Porters. His salesrooms are located in a three-story brick building, 30x90 feet, and belongs to himself. He employs two assistants. His trade, which is derived from the two cities, and towns within a radius of fifty miles, is large and steadily increasing. Mr. Andriessen was born in Prussia, in 1836, and came to this country in 1860. He has resided in Allegheny for many years.

GERMAN SAVINGS AND DEPOSIT BANK,—

Cor. 13th and Carson Sts., South Side.

The financial institutions organized and directed by the German element in this community seem to be founded upon a solid and conservative policy. A favorite among these is the German Savings and Deposit Bank, established under the State laws in 1871, designed mainly by its founders as a savings institution, but with ample scope for the transaction of a general banking business. The capital of the concern is \$89,000, and considerable operations are effected in New York and European Exchange, the Eastern correspondents of the bank being the Importers and Traders National Bank, New York, and the Central National Bank of Philadelphia. Gregor Fox, Esq., is the President of this institution, Frederick Maul, Esq., Vice President, and E. G. Scholze, Esq., Cashier. The board of directors, besides the two chief executive officers, consists of the following: Anthony Henger, Joseph Ploger, Anton Hennigen, Frank A. Ziefel, Adam Franz, Charles Espy, Jacob Gommel, John Arnsberg, Ferdinand Benz, Jacob Roth, Bernard Krugh. So officered and directed the bank can not fail to continue a career of success.

JAS. H. STUART,—*Mantles, Monuments & Tombstones, 815 Carson St., South Side.*

As a manufacturer of Mantles, Monuments and Tombstones, besides being a contractor for the execution of all kinds of Cemetery and Building Stone Work, Mr. Stuart has an experience of many years and has acquired a reputation for promptness, reliability and artistic work that reflects the highest credit upon his works. Located at 815 Carson street, these works occupy a space of 36x100 feet, stocked to the extent of about \$6,000, the annual business exceeding that sum three or four times. Sixteen hands are employed here (many of them being expert artisans) requiring a weekly disbursement of about \$150. Besides the constructive portions of his trade, Mr. Stuart deals to a considerable extent in Foreign and Domestic Marbles, Granites, etc., in which he can offer special advantages to the trade through Pennsylvania and Eastern Ohio. A native of Ireland and a resident of this city since 1861, Mr. Stuart had the experience of the best advantages in the art of Monumental and Tombstone construction in Boston, New York, Philadelphia, Baltimore and this city, and is fully identified with the industrial interests of this community.

O. T. ALTER,—*Tinware, Stoves, Hardware, &c., 4504 Butler St.*

The enterprising establishment of Mr. O. T. Alter is located at 4604 Butler street, where he manufactures Tin, Copper and Sheet-Iron Ware, and is prepared to do Roofing, Spouting, Guttering and Repairing and Job Work to order in this line. He also keeps a full line of Heating and Cooking Stoves, is sole agent for Monitor Oil Stoves, and deals in General Hardware, House Furnishing Goods, etc. His storeroom—built by himself—is 20x50 feet in size, of brick, with a work-shop in the rear. His stock will always be found complete, and we call special attention to the excellent supply of Monitor Oil Stoves of all sizes. This invention is very ingenious and will be appreciated by the public, especially all housekeepers, for its neatness and convenience. It makes no dirt and can be set anywhere.

Mr. Alter was born in Indiana County, this State, in 1846, and came to Pittsburgh twelve years ago. He is a practical workman of many years' experience. He commenced business for himself in 1871 and has built up a large and prosperous business.

JACOB GOETTMAN,—*Baker and Confectioner, 37 Chestnut St., Allegheny.*

The subject of our sketch commenced business on Main street, Allegheny City, in 1866. In April, 1873, he removed to his present location, and his success in business has been such that his capital, which was originally but \$300, has increased to \$30,000, and his trade has spread throughout the two cities and the adjacent counties. Mr. Goettman employs in his business three experienced hands, and being a practical baker and confectioner himself, nothing but a superior class of goods is manufactured. A stock of foreign and domestic Fruits, Nuts, Caramel Goods, and Ice Cream Pyramids, together with Jelly, Pound, Fruit, Lady and Fancy Cakes of every description, valued at \$500, is constantly kept on hand, and the yearly business \$5,000 to \$6,000. Mr. Goettman was born in Germany in 1843, and came to this city in 1852. He selected his present store, which offers ample accommodations, being 20x56 feet, and four stories high, and situated in a prominent location.

FIRST NATIONAL BANK,—Cor. of 5th Av. and Wood St.

Originally organized as the Pittsburgh Trust Co., in 1852, the First National Bank assumed its present status in 1863, shortly after erecting the splendid structure which it now occupies and which has been mentioned heretofore in the editorial introduction to this work. With a capital of \$750,000, and a line of deposits larger than confided to any similar financial institution in Pittsburgh, this bank has not only pursued a career of uninterrupted prosperity for more than a quarter of a century, but transacts to-day the most extensive banking operations known in this community. Mr. James Laughlin, a member of the firm of Jones & Laughlin, iron manufacturers, has since the foundation of the institution been its chief executive officer. Mr. Jno. D. Souilly, cashier, has also been connected with the bank in this capacity for a like period, and Mr. Chas. E. Speer, ass't cashier, having been identified with his present position for 25 years. The Board of Directors of the First National Bank is composed of prominent representatives of the best business talent in this city, consisting besides the President, Mr. Laughlin, of Mr. Alexander Nimick, Vice Pres., of Nimick & Co., iron manufacturers, Pres't of the Western Insurance Co. and associated with many of the first institutions and enterprises in Pennsylvania; Robert S. Hays, Esq., retired merchant; J. H. McKiloy, of the house of Armstrong & McKiloy, White Lead manufacturers; Thomas Wightman, Glass manufacturer; Jas. S. McCord, Esq., of McCord & Co.; James H. Lindsay, of Lindsay & McCutcheon, iron manufacturers; John Wilson, Esq., of J. Wilson, Son & Co., Grocers; and J. Painter, Esq., of the firm of J. Painter & Sons, manufacturers of Hoop Iron. The general management of the bank, vested in such hands, could hardly fail to be eminently successful, and conservative to a marked degree. The officers composing the cashier's staff are as follows: D. O. Barr, first teller, Geo. J. Gorman, second teller, B. S. Crumpton, ass't teller, W. S. Kuhn, ass't teller, B. L. Crawford, general bookkeeper, B. W. Finney, ass't bookkeeper, J. N. McCreary, individual bookkeeper, H. W. Moor, discount clerk, C. P. McKnight, collection clerk, D. W. Semple, corresponding clerk, Geo. Bryan, first messenger, P. Kerr, second messenger, and two watchman, M. Quinn and D. J. Kerr. Conducting a general banking business in loans, discounts, collections and exchange on all points, with New York correspondence in the Third and Fourth National Bank of that city, and in Philadelphia the Girard National Bank, being remarkable for the prompt, systematic method upon which its affairs are managed, the First National Bank of Pittsburgh is an institute that fully represents the solvency and success of the Iron City.

FARMERS & MECHANICS BANK,—Carson and 18th St., South Side.

Among the banking institutions of this city the Farmers and Mechanics Bank of the South Side is widely recognized as a favorite. This institution was organized and incorporated in 1872, under the State laws of Pennsylvania, with a capital of \$155,000, and from that period to the present time has pursued a career of unbroken prosperity. Besides the general banking business, transacted in loans, discounts and deposits, the bank does New York and European exchange, drawing bills on London, Paris and other foreign centers, the Eastern correspondence being mainly confined to the National Park Bank, New York, and the Tradersmen National Bank, Philadelphia. James McMaster, Esq., occupies the chief executive position, Mr. Abijah Hays being Vice President, H. F. Voygt, Cashier, and John S. McMaster, Teller, the management of these gentlemen resulting in a handsome surplus. The Directors are as follows, and are representative men upon the South Side, engaged in various commercial and manufacturing pursuits, all interested in the industrial thrift of the community: Messrs. Fred. Briggs, Thos. Coffin, D. O. Cunningham, Jas. McGeary, John Nusser, J. H. Ortman, Henry Rattleman, C. J. Schultz and Wm. Stewart. With this board supervising the business of the institution, its solvency is undoubted, and the annual increase of its business demonstrates the confidence with which it is regarded by the public at large.

D. G. ALLINDER, M. D.—Office at No. 92 43d St.

Dr. Allinder recently removed to his present location from Butler street, where he had been for some years. The Doctor was born in Pittsburgh in 1846—educated at the Western University of that city—studied medicine with Rob't. M. Tindle, M. D.—attended lectures at the University of Pa., graduating from that noted institution in 1869. After graduating began practice in Allegheny City, afterwards removing to present vicinity, where he has succeeded in building up a lucrative practice. The Doctor is an accomplished, agreeable gentleman, in the highest standing among his medical brethren. His father, Wm. Allinder, who is still living at the advanced age of 78, full of vigor and activity, was one of the original anti-slavery men in this city, combating the great evil at a time when it required a high degree of courage to assert anti-slavery sentiments. He wrote an able article in a periodical published by him called the *Christian Witness*, in which he, in a convincing manner, upset the theory of the Divine origin of the institution. An attempt was made to mob his establishment, and a time set for the carrying out of the fiendish scheme, headed by a notorious rough, Pierce Brennan, who kept a doggerly on Fifth avenue. The intended attempt came to the ears of Mr. A., who called on Mayor Irwin for a posse of police to protect him, which was furnished in time to repel the mob and protect the establishment. Mr. A. was not to be intimidated in this manner, but boldly continued the fight against slavery, and happily lives to see the full realization of his dreams and the grand triumph of the principles he so boldly advocated.

AUGUST BARTELS,—Florist, No. 185 Ridge Av., Allegheny.

The Greenhouses and Gardens of Mr. August Bartels, located at No. 185 Ridge avenue, are worthy of the attention of all gentlemen or ladies of taste and culture. Here may be found a profuse display of exotics and native plants in great variety, to please the eye and gratify the love of the beautiful. His conservatories are models of neatness and beauty, and are three in number, being each respectively 10x40 feet, 10x40 feet and 18x40 feet in size, warmed by three large heating furnaces to tropical temperature and filled to repletion with the choicest flowers. Mr. Bartels is prepared to furnish bedding plants or cuttings as desired, and makes a specialty of bouquets and cut flowers in beautiful designs for weddings, funerals, parties, church or parlor decorations, or any purpose required at short notice and at moderate prices. Although established on a small capital by Mr. Bartels, who is a thorough, practical gardener and florist, his business has steadily increased until it will compare favorably with any similar establishment in the city. He has now a stock of about \$1,500 in value and transacts a large and thriving business. Mr. Bartels is a native of Germany, but has resided in this country for a number of years.

JOSEPH FUHRER,—Foreign & Domestic Wines, Butler St., near 37th St.

It is of the greatest importance for purchasers of liquor to procure the very best, and the question arises, where can the very best be had? Go to Joseph Fuhrer, Butler street, near 37th street, Wholesale Liquor Dealer and Importer of Foreign and Domestic Wines, Pure Monongahela Rye Whiskies, etc. Mr. Fuhrer started with small capital fourteen years ago, in his present ward, and so wonderful was the increase of his business in that space of time that the present valuation of his stock amounts to \$10,000, while the amount of his business reaches \$20,000 per annum. Mr. F. occupies a building 20 feet front and 50 feet deep, employs two assistants, and has a trade extending throughout the entire county. He was born in Allegheny County and has resided in same county ever since, with the business interests of which he is prominently identified.

JACOBUS & NIMICK M'F'G CO.—Office, Bank of Commerce B'dg, Wood St.

A careful, detailed examination or review of the various enterprises of a manufacturing character that have given Pittsburgh the celebrity it enjoys, will invariably produce a constant succession of surprises. This in a great measure may be owing to the fact that as the population in the city proper increases, the works that were formerly on the outskirts become closely environed and crowded upon; property increases in value out of all proportion to its original cost, and liable to taxation upon a new basis every few years is finally sold, the plant re-located in the suburbs on an extended scale and the business goes on with renewed impetus. So the daily evidences of its existence in volumes of smoke and the roar of machinery are no longer so many illustrations of industrial thrift; the works that vibrated with the clash of labor are unsuggested by the quiet commerce that fills their place, and when in its new position, grown almost out of recognition, the establishment demands attention, a slight shock of pleased astonishment can hardly be avoided.

Among the many manufacturing enterprises to which these remarks apply, perhaps none affords a more striking example of their truth than the Jacobus & Nimick Manufacturing Co., whose plant for years on Diamond street, was removed in 1877 to Jacobus Station, a few miles west of the city, on the P. C. & St. L. R. R., where, with greater facilities and more ample resources, the business increases at a rapid ratio. Aside from the present and past importance of its operations this corporation is entitled to more than brief mention, from the fact of its historical relation with the developments of the manufacturing interests here and the character of its products, which it is perfectly safe to assert are not excelled in finish or quality, if equalled by any contemporaneous concern in the world. The origin of the company will be found in the novelty works established almost half a century since, and the variety works founded in 1855, both contributing after several changes to the formation of the Jacobus & Nimick Manuf'g Co. in 1863. Chartered under the mining and manufacturing laws of Penn'a, with a capital stock of \$150,000, the officers being Alexander Nimick, President; Samuel H. Jacobus, General Manager and Treasurer; and A. H. Elwell, Superintendent, for the past two years. The buildings of the company were erected with the sole view of being entirely adapted to the rapid, convenient and effective manufacture of the special wares produced by the concern. The main structure is an imposing brick edifice, four stories high with a central tower, smoke stacks, and covering an area 40x400 feet, and adjoining the foundry which is a one-story building of the same material 70x280 feet. The japing building is two-stories high 40x80 feet; the engine room an entirely separate erection, is of one-story and 80x60 feet, besides which there are gas houses, tanks and apparatus for lighting the establishment, a tin house and numerous other buildings of less importance for packing, finishing, storing, &c., covering in all a grand total area of about three acres. Here are constantly employed 350 operatives, requiring an outlay for labor alone on the part of the company of over \$1,500 per week, and here also will be found machinery which is in splendid adaptation to the work required, and mathematic accuracy as well as speed in action is justly considered as perfect as modern invention joined to capital and enterprise could devise; kept in motion by a steam engine of 125-horse power, supplied by two boilers of great strength and magnitude, and during a larger part of the year is operated night and day.

A mere list of the hundreds of separate articles manufactured by the concern would fill several pages of this volume, the illustrated catalogue of its wares contains over 33 pages imperial octavo, substantially bound, and may be had upon application by mail or otherwise free of charge; the main products, however, consist of door locks, latches, butts, knobs, scales, coffee mills and genuine bronze metal hardware used by builders in public and private buildings, besides book racks for church pews and railroad coaches, scale weights, fine irons, shutter and bolt drops for steamboats, Fairbanks and Union combination platform scales, shutter knobs, bars and flush and hook shaft lifts; special attention being given to the production of new and choice designs in bronze, silver and nickel plated and builders hardware generally. The confessed superiority of these goods in elegance, durability and cheapness, has resulted in a trade that extends not only over the entire United States, but leads to large and increasing exports to English, French, German, Russian and other markets, and sales that aggregate nearly a quarter of a million annually, three branch houses having been established to facilitate these operations—New York, Graham & Haines, No. 113 Chambers street; Baltimore, Arthur Emory, No. 9 German street, and Philadelphia, Shields & Bro., No. 119 North Third street; besides three traveling salesmen constantly upon the road. Mr. Nimick, who is regarded as a pioneer in this branch of manufacture, has been connected with the company as president since its origin. Mr. Jacobus, who directs the general business management of the concern, is a native of Brooklyn, N. Y., where he was born in 1844, coming to this city with his father, Rev. M. W. Jacobus, D. D., L. L. D., in 1851, his connection with the company dating from 1864. In all its departments the operations of the company are managed with tact, ability and signal success, contributing in a large degree not only to the reputation of Pittsburgh as a manufacturing centre, but greatly promoting the industry and wealth of the community. In its special line of product the Jacobus & Nimick Manufacturing Co. has no competitor west of the Allegheny mountains, and none anywhere that can either offer such marked advantages in price, or supply goods of such unequalled perfection. Determined to be in advance of its contemporaries in every respect, it is no adulation to say that the company achieves this object beyond all cavil, and this, together with the high standard of commercial honor and enterprise upon which it is conducted, may well deserve the respect universally accorded to it.

H. J. LANCE,—Manufacturer of all kinds of Wood Pumps, No. 1245 Penn Av.

H. J. Lance, manufacturer of all kinds of Wooden Pumps, is engaged in the business at No. 1245 Penn avenue, where the manufacture of Wooden Pumps has been carried on for twenty years, having been first established by Geo. McCoy, who sold out two years ago to Mr. Lance. Wooden Pumps of all descriptions are made here by Mr. L., making a specialty, however, of large pumps for deep wells. Mr. L. was born in Beaver Co., Pa., in 1844, came to Pittsburgh in 1864; having learned the pump-making trade, has worked at it all his life, accumulating by his industry considerable means. He is a gentleman possessing the confidence and esteem of the community generally.

JOHN A. RENSHAW & CO.—Family Grocers, 269 Liberty St., Cor. of 9th St.

The Wholesale and Retail Grocery and Tea establishment of John A. Renshaw & Co., at No. 269 Liberty street, is the leading house in the city, making a specialty of Fine Staple and Fancy Groceries, Teas, Canned and Bottled Goods, Foreign Conserves, Pickles, Fruits, Fish, etc. The house was founded in 1853 by Mr. Jno. A. Renshaw and Mr. Francis Bailey, under the firm name of Bailey & Renshaw, with a capital stock of \$10,000, which has since increased over 200 per cent. The present firm is composed of Mr. John A. Renshaw and Mr. John D. Carson, both natives of Pennsylvania. They occupy the entire four-story brick structure corner of Liberty and Ninth streets, carrying a large and carefully selected stock of Choice Family Groceries of the finer grades, Teas, Coffees, Spices, etc. They do a wholesale and retail business of not less than \$100,000 annually, employing seven assistants.

G. SCHLEITER,—Dry Goods, No. 89 Market St.

This house was established fifteen years ago by Gardner & Slater, who carried on the business for three years, when they were succeeded by the firm of G. Schleiter & Co. In 1876 Mr. Schleiter became sole proprietor and under his judicious management the business has increased, until the house to-day is ranked among the largest and most prosperous of the Iron City engaged in that line of trade. Mr. Schleiter was born in Germany in 1839, and came to this country when a young man. He has had a long experience in the Dry Goods line, is a careful and close buyer, a thorough judge of quality and value, and conversant with all the requirements of his trade. He keeps a large and elegant assortment of Silks, Dress Goods in great variety, Cloaks, Shawls, etc., employs twelve clerks and salesmen at a weekly expense of about \$100. His yearly sales amount to not less than \$100,000.

M'INTIRE & BRAND, —Grocers, No. 4208 Butler St.

One of the most extensive Grocery Establishments in the city, and the largest by far in that section of the city in which it is located, is that of Messrs. M'Intire & Brand, at No. 4208 Butler St. These gentlemen started in the grocery line in 1871 in a building near their present quarters, and in a comparatively small way, removing shortly afterwards to their present commodious warehouses in the large brick building, 25x90, owned by the firm, where they transact a flourishing and steadily increasing business. They carry a large and complete stock of Choice Family Groceries, Flour, Teas, Sugars, Coffees, Spices, and in fact every article usually found in a first class, well regulated establishment of this description, varying in value from \$10,000 to \$15,000. Their annual trade will average more than \$75,000 and has reached as high as \$100,000. Buying strictly for cash and adhering to the cash system in their dealings with customers, they are enabled to sell goods on a very small margin. Both members of the firm devote their personal attention to the business, and the house has achieved an enviable reputation for mercantile integrity. Mr. D. R. M'Intire is a native of Allegheny City and was born in 1842. He made Pittsburgh his home since infancy and for many years has been identified with the business interests of the city. For three years he carried on the Drug business on Fifth avenue, and has been engaged in various other business enterprises in different locations, in which he has been uniformly successful and during his comparatively brief business career has acquired a handsome competence through his own exertions, having started in life without capital, save in energy and determination to succeed. He now occupies the important position of President of the Metropolitan National Bank of Pittsburgh, and has been prominently connected with several other financial institutions. Mr. Frederick Brand was born in Germany in 1834 and came to the United States in 1856. He worked on a farm for a number of years. By industry and economy he accumulated sufficient capital to engage in the grocery business in a small way at first, afterwards associating himself with Mr. M'Intire and moving to their present location; they have done a prosperous and steadily increasing business, and the firm is fully entitled to a prominent position among the representative business houses of the Iron City.

WM. WALTON, —Dry Goods, Millinery, Notions and Carpets, 4310 Butler St.

Mr. Walton's fine establishment is located at 4310 Butler St., where he has a large store room, 20 ft. front by 75 ft. deep, completely stocked with everything in the above mentioned line, and where he is doing a large and growing business, extending throughout a large part of the East end of the city. His establishment enjoys a high degree of popularity, and which has been earned by the just and honorable dealings and enterprise. He has merited and is in every way worthy of the generous patronage bestowed on him. Mr. Walton was born in Birmingham, England, in 1833, came to the U. S. in 1864 and embarked in the Jewelry business in this city, continuing therein until engaging in the present business in 1874. Mr. Walton was among the first of the Pittsburgh Fire Commissioners, having been elected at the same time and serving on the Commission with Capt. J. H. Stewart and R. W. Mackey, aiding by his counsel and active efforts in perfecting one of Pittsburgh's most noted institutions. He is deputy tax collector of the city, takes a lively interest in public affairs, wielding influence in politics in his ward and city, and possesses the esteem and confidence of the community.

JOHN L. DONALDSON, —Wholesale Wines & Liquors, 376 & 378 Penn Av.

One of the best known and deservedly popular wholesale liquor establishments of the Smoky City, is that of Mr. John L. Donaldson, at Nos. 377 & 378 Penn avenue, near Eleventh street. Mr. Donaldson commenced business for himself in Sept. 1874, at his present location, where he occupies the entire four floors of the spacious warehouse, 20x120, and carries a finely selected stock of Foreign and Domestic Wines and Liquors, Brandies, Gins, Rums, &c., making a specialty of pure old Rye and Manogahela Whiskies. His present stock is valued at about \$10,000 and his trade, which extends throughout the two cities and the adjoining counties, will reach more than \$25,000 annually. Mr. Donaldson is a native of the old fourth ward, Pittsburgh, and was born in 1845. He is a young man of energy, enterprise and business ability, with a large acquaintance throughout the two cities, and deservedly popular in private life and in the mercantile community. Since the very inception of his business career he has transacted a large and flourishing business, which is steadily increasing from year to year. As he aims to keep only the best and purest qualities of unadulterated articles, the trade can always rely upon procuring of Mr. Donaldson the most desirable goods and at reasonable prices.

LOUIS MUELLER, —Fancy Furs, Hats & Caps, 20 Sixth St.

Engaged in the manufacture of Fancy Furs, Hats and Caps, and dealer in Buffalo Robes, &c., the house of Louis Mueller has a reputation extending throughout the neighboring counties and states. Mr. Mueller is located on the spacious building 18x70 at No. 20 Sixth street, (late St. Clair,) near the suspension bridge, was born in Germany in 1826. He came to the United States in October 1849, and resided for some time in Philadelphia, afterwards removing to California; in 1853 he located in Pittsburgh, where he has since resided. He started in business twenty years ago with a comparatively small capital, but by industry and close application to business he has accumulated considerable means and now carries a stock of about \$10,000 in value, consisting of a full line of Fancy Furs, Buffalo Robes, Hats, Caps, &c., and makes a specialty of altering, repairing and cleaning furs of every description, employing three assistants regularly and transacting a business of not less than \$10,000 per annum. This being the only establishment of its kind in the city, and the business is steadily increasing from year to year.

B. H. VOSKAMP & CO. —Wholesale Grocers, 343 Liberty St.

The well-known wholesale Grocery House now conducted by B. H. Voskamp & Co., was founded in 1862 by Segh-meyer & Voskamp, and in 1872 Mr. B. H. Voskamp became sole proprietor, under the firm name and style above given. He occupies the entire three-story brick warehouse 25x110 at No. 343 Liberty street, carrying a full and complete stock of Groceries, Flour, Provisions and country produce generally, varying in value from \$25,000 to \$30,000. He employs one book-keeper, one salesman, three general assistants, and keeps two fine double teams in constant use, delivering goods to his various customers in the cities and to the different railroad depots. Mr. Voskamp buys strictly for cash and is thus enabled to offer extraordinary inducements to the trade. He transacts a large local business and has an extensive trade throughout Western Pennsylvania, Eastern Ohio and West Virginia; his annual sales amounting to not less than \$200,000. Mr. Voskamp was born at Hanover, Germany, April 27th, 1827, and has resided in Pittsburgh for the past thirty-one years, and during that entire period has been actively engaged in business and prominently identified for many years with her mercantile prosperity doing much to develop her wholesale trade and placing the city in the proud position she now holds as a commercial as well as manufacturing metropolis. He is a public spirited and liberal-minded gentleman, taking an active part in whatever tends to the best interests and welfare of his adopted city. During the years 1876 and 1877 he represented his ward in the Common Council to the entire satisfaction of his constituents and with credit to himself. Mr. Voskamp is justly entitled to a prominent position among the self-made and representative business men of the Iron City.

THE UNITED STATES IRON AND TIN PLATE CO.

Main Office, Demmler Station, Pa., Office, 118 Smithfield St.

This important industry was organized and incorporated in 1873, under the mining and manufacturing laws of Pa. The Company was first established with the design of producing tin andterne plates, the authorized capital was \$400,000, and in August 1874, the works having been constructed in the interim went into active operation. Success immediately attended the efforts, and the United States brand upon its product was justly considered as an ample guarantee of excellence. Ore production in England, however, and a misconstruction of the tariff law at home, relating to this class of goods, virtually abolishing all protection, made it impossible for the American manufacturer to compete successfully while paying labor double the price demanded abroad. Carefully and with great foresight adjusting their business to escape these unexpected contingencies, they devoted their entire resources to the manufacture of fine sheet iron. In this their success has become conspicuous, the demands being so great as to cover the whole capacity of the works for months in advance; the annual sales amounting to not less than \$230,000. The works having facilities for turning out 2,500 tons of manufactured iron per year. Located at Demmler Station, between the B. & O. R. R. and the Monongahela river, immediately below McKeesport; the works cover an area of five acres, the property of the Company being double those dimensions. Machinery of the most perfect and powerful character is employed, consisting in part of four puddling furnaces, four nabbling fires, one heating furnace, two double sheet mill furnaces, three annealing furnaces and four tinning stacks, besides one large hammer with 6,000 lbs. stroke, one large mill engine of 500 horse-power, one blast engine of 80-horse power, four smaller engines ranging from 5 to 20 horse-power, and a battery of four boilers with 900 horse-power. One hundred and fifty hands are employed here, to pay whom a semi-monthly disbursement is requisite of about \$3,000. The officers of the corporation are at present: J. H. Demmler, President; D. J. Thomas, Vice President; James Nimick, G. W. Coffin, F. E. Schenk, F. Close, E. Shoemaker, H. H. Demmler and W. C. Cronemeyer being Directors; H. H. Demmler, Treasurer; W. C. Cronemeyer, Secretary; Samuel Truby and Albert J. Demmler, mill managers, and Otto Rossler and Herman Heeren, bookkeepers. Among these names will be noticed many of those which have figured prominently before the public in connection with the interests and prosperity of the city, adding solidity to every enterprise with which they are identified, and under whose influence the United States Iron and Tin Plate Company have achieved so great a degree of prosperity and such well merited consideration.

HITCHCOCK, McCREARY & CO.—Grain and Commission,

Cor. Smithfield and Liberty Sts.

Established in 1859, as Huffman, McCreary & Co., this firm assumed one year later its present style, composed of L. P. Hitchcock, Wm. McCreary and John H. McCreary, dealing in Grain, making a specialty of Wheat, and also operating as Commission Dealers in this branch of products. The premises first occupied by the house were on 2d avenue, at that time the center of the wholesale trade of the city, where it remained for about seven years, removing in 1866 to 349 Liberty st., changing locations again within the past few months to the offices situated as above, in McCance building. The trade of the house consists mainly in the purchase of grain in the Western States, and its shipment and supply to the local and Eastern markets, and in this direction the operations of the firm are said to exceed in extent those of any other firm in this city. It was mainly owing to the exertions of this concern that the first grain elevator was erected in Pittsburgh, while its connection with other enterprises, conducive to the public benefit or convenience, has caused it to be long recognized as one of the most public spirited firms in the Iron City. Mr. Hitchcock is a native of Hartford, Conn., where he was born in 1811, but has been identified with the interests of this community for over a quarter of a century. Mr. Wm. McCreary is originally from Washington County, this State, being born in 1829, and removing to this city, with his brother, John H. McCreary, in 1855. The latter was born in 1836. In the commission department the firm has established an enviable reputation for promptness and reliability. This house has perhaps done as much to advance the industrial interests, and develop the latent resources of the community as any other one concern. Beginning with restricted resources at first, it has acquired a position in commercial circles to which few houses ever attain, and an increasing range of usefulness that entitles it to the general esteem and respect.

JAMES M. WILKINSON,—Stationer & Bookseller, Cor. 5th Av. & Wood St.

Of the several firms or individuals in this city engaged in the Book, Stationery and Printing business, it may be safely asserted that none are better stocked or conducted with a more thorough knowledge of the requirements of the trade, than the establishment of Mr. James M. Wilkinson. For many years connected with one of the oldest Book and Stationery stores in the city whose business was mainly intrusted to his care, and subsequently with E. S. Davis & Co., whom he succeeded in 1878. The career of Mr. Wilkinson for more than 12 years in his present vocation has given him an experience, the advantages of which are observed daily in the management of his business, which is rapidly increasing. Located on the corner of 5th avenue and Wood street, the premises occupied by Mr. Wilkinson are in the very centre of the business portion of the city; they consist of one double four-story brick building, the lower floors being devoted to retailing and the upper to jobbing, for which the house has peculiar advantages, in connection with eastern manufacturers and importers. The stock of stationery carried by this establishment is the most complete and best selected in the city, always embracing everything desirable, new, rare or costly. In miscellaneous and Sunday or common school books the selection is equally wide and includes an assortment in the purchase of which great care has been displayed. Besides these essentials Mr. Wilkinson makes a specialty of supplying steamboat and commercial books, blanks and printing of all kinds, evincing a taste and discrimination in this department highly conducive to the satisfaction of his customers and the healthy enlargement of his trade in this line. The minor articles pertaining to the business are by no means overlooked; Wilkinson's best lead pencils surpass Faber's and at half the price. To fancy goods he has given particular attention, his store being an attractive bazaar for all kinds of charming nic-nacks allied to the trade; archery and croquet goods being in great force. With an elegant site and establishment, a stock averaging in value about \$35,000 and an annual business of nearly double that amount, the enterprise of Mr. Wilkinson is justly entitled to the consideration and patronage of the public, and its projector to the esteem that energy, reliability and talent always inspire.

W. G. MAHAFFEY,—Boot & Shoe Maker, 102 Fourth Avenue.

The art of making Boots and Shoes to fit the feet of the wearers with nicety, and afford no pain or injury to corns, bunions or growing nails, is one of sufficient importance to demand some attention. Mr. W. G. Mahaffey has acquired this art by long experience and considerable study. His claims, as the only anatomical shoe maker in these cities, are well founded. More than this, it is asserted that he is the only real artist in this section of the State, in the matter of accurately adapting the last to its particular work, so that not a single flaw or defect shall be found in the finished article. A native of Indiana Co., Pa., Mr. Mahaffey was born in 1836, removed to Pittsburgh nearly 20 years ago, and has since become prominently known in his vocation, at which, since 1864, he has worked for himself. Those who once enjoy the luxury of wearing boots or shoes of his construction will never wear other makes, and, as a consequence, Mr. Mahaffey's trade is pretty widely extended. Ladies and gentlemen will find it greatly to their comfort to call on Mr. Mahaffey, who is not only unsurpassed as a skillful maker of fine boots, shoes, gaiters and slippers, but guarantees such fits as shall make pedestrianism a matter of thorough enjoyment and delight, instead of the unutterable torment it frequently becomes.

W. A. NIMICK,—*Pittsburgh Transfer Co., General Office, No. 182 Second Av.*

The business of transferring and forwarding freights in this city, as conducted under the management of Mr. W. A. Nimick, has grown within the past few years to such importance and dimensions as to properly demand classification among the industries of Pittsburgh. The fact of there being no central freight depot in this city, common to all the lines of railways centering here, makes the necessity of such an enterprise extremely apparent. From the Pgh. & Lake Erie, B. & O., Pgh., Va. & Charleston, and Pgh. Southern Railroads, comes much of the business of the Transfer Co., besides connecting with all the various lines of steamboats that reach this port. Besides the regular freight transfer traffic, goods are forwarded to all parts of the United States and Canadian Provinces. Baggage delivered to all sections of the cities and surroundings or checked through to all points from residences or hotels to destination, and passengers called for in time to make any given train or boat. Freight consigned in care of the Pittsburgh Transfer Company will be forwarded to any point designated or delivered in any part of Pittsburgh or Allegheny. These operations require the assistance of 30 hands, 54 horses and 24 vehicles of all descriptions, together with the constant oversight and supervision of Mr. Nimick, whose success has been such that besides owning the large outfit mentioned, the business has reached large proportions, extending throughout the United States and Canadas. The business was established by Mr. Nimick four years since, under his own name, changing to that of the Pittsburgh Transfer Co. on the completion of the P. & L. E. R. R. A native of Allegheny City, Mr. Nimick was brought up in New Orleans, returning to his birth-place before the breaking out of the late war. Endowed with fine business and executive ability, his energy in the prosecution of his business has led to the most satisfactory results—so much so that the Company of which he is the proprietor has become an indispensable institution, adding greatly to the industry and prosperity of the Iron City.

MILLS & CO.—*Pittsburgh Chemical Works, Lye & Cements, 260 Liberty St.*

As the largest and most extensive dealers in Cements in Pittsburgh and the sole manufacturers of Concentrated Lye and Ka-Lye (the latter being a specialty), the firm of Mills & Co. come fully within the scope of any work bearing upon the industries of this city. Besides the products above mentioned, the trade includes White Lime, Sand, Calced and Land Plaster, and other Fertilizers, besides Drain Tiles and Sewer Pipe, Chimney Tops, Grate Tiles, Fire Brick and Terra Cotta Ware. The business was established under the same style in 1868, and from that time has been increasing annually. The premises occupied, on Liberty street, consist of one large building having five floors and dimensions of 20x30 feet. The Lye manufactory is located at Homestead, Pa., and includes two buildings, one being of brick, 30x60 feet, the other of wood, 15x40 feet, besides which the firm have a warehouse for storing at No. 211 First avenue 24x65 feet, and another for the same purpose on Virgin alley. The trade of the house ranges mainly within a radius of 200 miles of this city and amounts to between \$50,000 and \$60,000 annually. The several members of the firm are as follows: Isaac Mills, Jr., Geo. Sheppard, J. Brankstone and S. C. Bullock, all of whom are actively engaged in operating the business, aided by eleven or more employees. Enterprising, reliable and honorable in dealing, the firm of Mills & Co. are widely and favorably known in this community for these characteristics and are very justly accorded the general confidence of the public and a high place in the esteem of the trade.

SEVENTH AV. HOTEL—*Elias J. Unger & Co., Prop's., Cor. 7th Av. & Liberty St.*

Constructed within the past few years, the Seventh Avenue Hotel has already achieved a place in the consideration of the public that ranks it equal to any contemporaneous establishment in the United States, and reflects credit upon the enterprise that designed it, the ability that conducts it, and the community that patronize it. In everything that pertains to the comfort and well-being of its guests, this hotel is a sample of perfection. In the matter of sumptuous furnishing, steam elevators, bath rooms, heating and ventilating arrangements, spacious dining rooms and parlors, airy hall-ways, prompt and polite attention, with confessedly the best menu in the city, the popularity of the "Seventh Avenue" is not, in the light of these advantages, surprising. Five stories in height, and one of the most imposing edifices in the city, the house contains 150 rooms for guests and is supplied throughout with water and conveniently placed fire escapes, so that no possible danger could assail the inmates in case of fire. Perhaps no gentlemen in the State are more capable than E. J. Unger, Esq., and Mr. Henry Kanaga. The former has a national reputation as being for more than ten years proprietor of the Union Depot Hotel of this city, destroyed in 1877 during the labor riots, and combines in himself such qualities as have made him a favorite with the traveling public and a citizen to whom is accorded the highest consideration. Mr. Kanaga is likewise well-known and widely esteemed in this community, not only as being connected with this hotel since its opening, but his former management of the Girard House, Philadelphia. The Seventh Avenue Hotel occupies a place rarely achieved by any similar establishment.

HENRY LEVY—*Hosiery, Notions Furnishing Goods, Peddlers' Supplies, 84 Diamond.*

As a Wholesale Dealer and Jobber of Hosiery, Notions, Gentlemen's Furnishing Goods and Peddler's General Supplies, Mr. Henry Levy has acquired an excellent business and a solid position in the commercial community of Pittsburgh. The premises he occupies are eligibly situated and consist of a spacious three-story building, 20x120 feet at No 84 Diamond street. Here, with a stock valued at from \$5,000 to \$6,000, Mr. Levy conducts a trade of about \$10,000 annually, besides which he carries on successfully a General Store at Penn Station in Westmoreland Co., Pa., which nets a very satisfactory yearly return for the capital invested. A large part of the trade of Mr. Levy is in supplying peddlers with a general assortment of such goods as they are likely to require or can dispose of at a profit, offering better inducements to this itinerant trade than any other man in the business. Having connections in New York and the Eastern markets, enables him to buy always upon such terms as involve "bed-rock" prices to his customers.

Mr. Levy is a native of Poland, born in 1836. At the age of 21 he came to this country and since 1872 has been a resident of this city, with the business interests of which he has been more or less identified ever since. Prompt and reliable in all his transactions, Mr. Henry Levy has already acquired a trade that reaches throughout the city and surrounding portions of the State.

MANLEY & HILL,—*Keystone Dining Rooms, 293 Liberty St.*

The Keystone Dining Rooms were established in 1868 by Mr. Wm. Simpson. In April, 1879, Mr. Amel Manley, a gentleman of long experience in the leading hotels and restaurants of the country, assumed the management and proprietorship of these model rooms, which are eligibly located in the very heart of the business community at No. 293 Liberty street. The dining rooms are 25x110 feet, fitted up in the neatest and most elegant style, with a seating capacity for about sixty persons at one time. The tables always present a handsome appearance, the ware being of the finest, while the viands are not only admirably cooked, but served in the most attractive style. Mr. Manley has a large number of regular boarders, and the average attendance at his tables is about 150 persons per day. The finest meals in the city at 25 cents each and weekly board for \$4. He gives his personal supervision to the business, employs only first-class cooks and attentive waiters.

GERMAN FIRE INSURANCE CO.—*Cor. Wood St. & Sixth Av.*

One of the most safe, solvent and conservative Fire Insurance Companies in Pittsburgh, the "German" claims notice in this work as being in many respects a representative institution. The above underwriting organization was established in 1862 with a cash capital of \$100,000, which has been since increased to double that sum, and from its very inception has proved a signal success. The officers of the Company at the present time are: Messrs. C. Barchfeldt, President; Jos. Lang, Vice President; F. L. Gross, Secretary, and F. W. Krugh, Ass't. Secretary; are gentlemen widely known in connection with the enterprise that has been directed under their management, with such skill and discernment. Since entering upon its career the Company has paid losses to the amount of \$181,467.73, in spite of which considerable outlay, over \$200,000 has been divided among the stockholders as profits; leaving the available assets of the concern at the present date over \$350,000, and net surplus \$104,042.60. This handsome showing is sufficient to convince the reader of certain facts in regard to this Company that can hardly be disputed:—1. It has been honestly managed. 2. Its business has been cautiously conducted and risks carefully selected. 3. Its investments have been safer and good. 4. Experience and ability have characterized and guided its operations. The business of the Company reaches not only through Penn'a, but Ohio, Illinois, Missouri and California, as well as being largely centered in this city, where it is looked upon as a favorite and supported accordingly.

SCHMIDT & FRIDAY,—*Wines and Liquors, 384 & 386 Penn Av.*

For nearly half a century this old established and well-known house has been the recognized headquarters in Pittsburgh for pure and unadulterated Wines and Liquors for medicinal and family use. The house was founded in 1836 by Mr. William Schmidt, who for nearly twenty years occupied a prominent position among the representative business houses of the Iron City. In 1855 he was succeeded by Mr. Joseph Schmidt, who for ten years sustained the well earned reputation of the original proprietor. In 1865 Mr. William J. Friday associated himself with Mr. Schmidt under the firm name and style of Schmidt & Friday, and these gentlemen have since conducted the business with signal ability and marked success, and the house to-day is the most extensive of its kind in Pittsburgh. They occupy the spacious and commodious double warehouse 80x120 with four floors and basement at Nos. 384 and 386 Penn avenue, (near the Union Depot), carrying an average stock of about \$125,000, consisting of every variety of Foreign wines, brandies, gins, rums and cordials, pure rye, wheat and Bourbon whiskies of the choicest brands, from the most renowned distilleries of the country. They enjoy a large city trade with a liberal patronage from dealers and druggists throughout Eastern Ohio, Western Pennsylvania, West Virginia and other States; their annual sales reaching \$200,000. In addition to the stock carried in their warehouse Messrs. Schmidt & Friday keep constantly on hand in bonded warehouse large quantities of pure whiskies, and have a capital invested in the business of not less than \$150,000. Both members of the firm are natives of Pittsburgh and have for many years been prominently identified with the wholesale liquor trade. Four assistants are constantly employed by this house, one as bookkeeper, one as traveling salesman and two as resident salesmen and general assistants in the store.

M. B. CAIN,—*Eagle Shoe Store, 87 Smithfield St.*

Every business venture that bears upon its face the stamp of genuine enterprise, whether in its youth or age, is justly entitled to more or less consideration in this work. Upon these grounds the establishment of Mr. M. B. Cain, though but lately founded, is not to be omitted, particularly as in the shoe trade was a vacant niche, which by the discernment of Mr. Cain has been no longer left unoccupied. Besides a general assortment of ladies, misses', children's, men's and boys' wear, all of the finest grades and makes, to the value of \$10,000, or more. Mr. Cain has made particular provision for the wants of gentlemen by securing a remarkably choice stock of thoroughly sterling and stylish goods, which, by means of certain special advantages accorded him by the manufacturers, he is enabled to offer at prices never before duplicated in Pittsburgh. This assertion is made with a substantial knowledge of the facts, and the public can verify the statement if skeptical, very much to the profit of those who are led to do so, Mr. Cain is a native of this city, and was born here in 1852. He has been identified with the shoe business for many years, and has acquired an experience that will make the Eagle Shoe Store the resort of the best cash buyers in Pittsburgh and environs. Of the many engaged in the same business, Mr. Cain takes a front rank for enterprise, reliability and liberality, and for these and other admirable qualities should receive the support of the public, and the consideration of the community, to which he gives an impetus in the right direction.

DICKSON, STEWART & CO.—*Coal, Office, 567 Liberty St.*

One of the best known firms in the Coal trade, as well as one of the oldest now extant, the house of Dickson, Stewart & Co. is properly entitled to more than mere mention in this work. More than a quarter of a century ago this enterprise was commenced by the same firm and under the existing title, the demise of Mr. Stewart, though changing the partnership individually, had no other practical result, as the interest remains rested in his heirs. Since 1852 the house has pursued the route upon which it started, with but few variations from a uniform prosperity. The mines of the company are located at Turtle Creek, about 12 miles from the city, on the Pennsylvania R. R., and are very extensive, sixty hands being regularly employed, resulting in a product of 700,000 bushels of the best bituminous coal known to this market annually, and a trade of about \$50,000 per year. Mr. T. C. Dickson, the senior partner and manager of the concern, was born in Ireland, in 1827, and accompanied his parents to this country and city when but 5 years of age. He is a man of comprehensive knowledge of general commercial business and affairs. His career has been marked by a policy of rectitude, and many positions of responsibility and trust have been filled by him with great ability. As conducting to the industrial thrift of the community, this firm has contributed largely, and is entitled to the esteem and respect which it has acquired in so large a measure.

CASEY & FOGARTY,—*Wholesale Wines & Liquors, No. 339 Liberty St.*

The well-known Wholesale Liquor establishment now conducted by Casey & Fogarty dates back its origin more than forty years, having been founded in 1837 by Robert Moore, Esq., who was succeeded in 1855 by the firm of Black & Woods. In 1860 Mr. Black retired and Mr. Woods continued the business alone until May, 1869, when Mr. T. D. Casey became a partner, the firm name and style being Robert Woods & Co. In August, 1871, Mr. Woods retired and Mr. T. C. Fogarty associated himself with Mr. Casey and the firm became as at present. They now occupy the spacious four-story brick warehouse, 24x80, at No. 339 Liberty street, the same building occupied by Robert Watson from 1845 until 1875. With a few exceptions it is the oldest liquor house in the city. The firm constantly carries a stock of \$25,000 to \$30,000, comprising every variety of the Choicest Wines, Brandies, Gins, Rums, etc., of their own importation and a full line of Pure and Unadulterated Old Rye and Bourbon Whiskies from the best distilleries in the country. Their stock is selected with great care, especially for their own trade, which is of the better class throughout Eastern and Western Pennsylvania, Eastern Ohio and Western Virginia, and their annual sales will reach from \$100,000 to \$125,000. Both members of the firm are gentlemen of long experience in this line and devote their personal attention to the management of their extensive business, employing four assistants as general salesmen. They have both resided in Pittsburgh for many years and been prominently identified with the business in which they are engaged.

FIFTH AVE. HOTEL,—*Frank McCoy & Bro., Proprietors, 131 & 133 Liberty St.*

Half a century ago, long before the sound of a locomotive-whistle had been heard west of the Allegheny Mountains, and when the traveler, arriving at the end of his journey, alighted from a stage coach, the old "Black Horse Tavern" stood where now stands this well known commercial house. The unpretentious one and a half story frame building, that formerly divided the honors in this line of business, has long since been supplanted by a substantial edifice, fronting 92 feet on Liberty St., and extending back 112 feet, being four stories high. This building was erected by Mr. Samuel Hare, in 1854, when the "Black Horse Tavern" became a thing of the past, and Hare's Hotel came into existence. For 22 years this house was well and favorably known, not only to the residents of Western Pennsylvania who occasionally visited this metropolis, but to thousands all over the country, traveling for business or pleasure, who availed themselves of its accommodations. In 1876 Mr. Hare resigned all interest and control of the house, and it passed successively into the hands of Messrs. Hugh Keys and Joseph Wright, and in August, 1878, the present proprietors assumed its management. It is needless to enumerate the various changes that have taken place in its internal arrangements since Messrs. McCoy & Bro. have assumed its control. Suffice it to say that the Fifth Ave. Hotel is now ranked among the best houses in the city. They have put the house and every department in complete repair, and supply their table with the choicest the market affords, and, what is equally important, have one of the best and most experienced cooks, as well as attentive and courteous waiters. The location is central, situated about equal distance from the court house, post office, railroad depots and steamboat landings. The proprietors of this house, in order to make it first-class in every respect, have put their price at the nominal figure of \$1.50 per day. In connection may be found one of the finest stables in the city, also one of the principal depots for the sale of stock in Western Pennsylvania. It is situated in the rear of the hotel, is 92x125 feet in size, and affords accommodations for 150 heads of horses, is light and well ventilated. In the various changes that have taken place in the management of this old stand, the traveling public have probably never had more careful and assiduous caterers to their comfort than the present proprietors of this house extend.

S. LINDSAY, Jr., & CO.—*Flour and Groceries, 157 Liberty St.*

Among the prominent dealers in Flour, Groceries, &c., is the above firm, occupying 3 floors of No. 157 Liberty St., each 15x100 feet in size, in which is carried one of the finest stocks of Flour and Groceries to be found in the city, ranging in value from \$10,000 to \$12,000. Two hands are employed to assist in carrying on this business, amounting to over \$75,000 per annum. The firm is especially noted for its manufacture of Flour, in which it particularly excels. It was started in 1831, by Samuel Lindsay, the father of the present proprietor, who was born in Ireland in 1794, and came to the United States in 1814, and to Pittsburgh soon after, being thus one of the pioneer business men of Pittsburgh. Mr. S. Lindsay, Jr., is a native of Pittsburgh, born in 1833. Wm. M. Lindsay, bookkeeper of the firm, is a brother of Mr. Lindsay, Sr., and was born in this city, in 1849.

LOUIS VOLZ,—*Plain & Fancy Job Printing, 137 Smithfield St.*

Although he executes every description of fine mercantile and job printing in the highest style of the art, the specialty for which Mr. Volz is particularly noted is German and Commercial printing in all its branches. His office, located at No. 137 Smithfield street, is supplied with new and desirable fonts of all the latest styles and novel varieties of job type, selected by Mr. Volz expressly to meet the requirements of his trade. He commenced business at his present location in 1874 and his trade amounts to not less than \$3,000 per annum. He employs three practical printers who are familiar with both the English and German languages. Two Liberty presses, (one quarter medium and one eighth medium) of the latest patterns. Mr. Volz enjoys the patronage of many of the leading German merchants and business houses. He was born in Hesse Darmstadt, Germany, in 1848, and came to the United States in 1872, locating in Pittsburgh the same year.

EHLERS & HERMAN,—*Undertakers—Leichenbestatter—Livery Stable.*
No. 100 Madison Av., Allegheny.

These gentlemen commenced business at their present stand in 1874. They have had a very liberal share of patronage since they embarked in their business, and their present stock is valued at \$3,000, while the annual amount of business is about \$10,000. They not only do Undertaking (Leichenbestattung) in all its branches, but keep Livery and Sale Stables. C. W. Ehlers and Henry Herman compose the firm. Mr. Ehlers alone controls the livery department, while the undertaking establishment is under the joint management of the partners. Their rates and prices are among the lowest in the trade, and their coffins, caskets and funeral goods are of the best quality. Mr. Ehlers was born in Germany, in 1839, and came to this city in 1854. Mr. Herman was born in Switzerland, in 1833, and came to this city in 1846. They are industrious and energetic men.

J. A. GILLELAND,—*Dry Goods, Notions and Clothing, 133 Beaver Av., Allegheny.*

Mr. Gilleland occupies the three-story brick structure, 24x60, at No. 133 Beaver avenue, Allegheny City, where he carries a large and elegant assortment of general Dry Goods, Ladies' and Gents' Furnishing Goods, Trimmings, Notions and Small Wares, and also a large stock of Clothing and fine piece goods, of both foreign and domestic manufacture, making a specialty of merchant tailoring, in which department he has secured the services of a first-class cutter, and employs nine hands, with an average monthly pay-roll of \$400. The business was established by Mr. Gilleland many years ago, and has steadily increased from year to year, until he now transacts an annual business of not less than \$16,000, and carries a stock of over \$6,000, which is full and complete in all its departments. His trade, which is both local and transient, will compare favorably with that of any similar establishment in the twenties. Mr. Gilleland is a native and life-long resident of Allegheny City, and his establishment is one of the largest in this section of the city.

I. HIPPELY,—*Flour, Grain and Mill Feed, Nos. 294 and 360 Ohio St., Allegheny.*

This very flourishing establishment was started by Hippely & Vickers in 1864, with a capital of less than \$500. The business of the house may be measured by its increased capital, which now runs up to \$15,000. The stock on hand is seldom less than \$5,000, and the business transacted yearly is about \$70,000. Mr. Hippely occupies two stores, one 25x55 feet, and the other 25x105 feet, two stories high, and well adapted to the business—each doing a wholesale and retail business, and employing, in both, five men. Besides the proprietor two salesmen are employed, with trade in this and adjoining counties. Mr. Hippely was born in Erie, Pa., in 1834, and came to this city in 1861. He has been city weigh-master, and is now a director of the Workman's Savings Bank. He is energetic in business, and popular as a citizen.

A. FRENCH & CO.—Cast Steel Spring Works, Office & Works Cor. 21st & Liberty St.

For many years it has been pretty thoroughly understood throughout the entire country, that for the supply of every article, material or product used in the construction and maintenance of railways and railway rolling stock and machinery, Pittsburgh was the central depot; nor has the reputation of the Iron City in this respect been limited to our own continent, as is proved by the fact that annually increasing exports of this class of goods to England, France, Australia and South America, show the high estimation in which they are held abroad. Upon the various scientific and mechanical problems, the solution of which engendered the perfection of the American railway system—perhaps an amount of inventive genius has been directed that would more than counterbalance the combined efforts of the rest of the world in this branch of development. One of the most puzzling questions which arose during the early history of railroading was that, with reference to the proper application and best material and construction of springs. This point of really paramount importance engaged the study and attention of inventors for years, gradual improvements taking place step by step, until the introduction of the Elliptic Steel Springs, manufactured by A. French & Co., in 1864, which at once achieved all that had been desired and striven for, and more than had been expected. To the credit of the perception and application of the principles upon which these springs are constructed and employed, Mr. Aaron French is undoubtedly entitled—his experiments and observations as a railway blacksmith having led him to the conclusion that by a formation of springs that should at all times possess uniformity of action with reference to varying strains—the total weight being apportioned equally upon the whole spring, instead of upon the weakest portion, the great desideratum would be obtained. To the embodiment of this idea in a practical form Mr. French devoted himself and was not long in arriving, through the aid afforded by the crucible cast steel, the properties of which were attracting great attention at that time—at a very satisfactory conclusion of his labor. In conjunction with Mr. Calvin Wells, of the firm of Hunsey, Wells & Co., manufacturers of steel, an organization was effected under the style of A. French & Co., (for the exclusive production of elliptic cast steel springs for railroad cars and locomotives,) which at once acquired a prominent position and an assured success. The features of Elliptics, which make them unapproachable as springs, are their *slow* motions to an almost unlimited extent with their power of absorbing many disturbances in *one* motion, and the time they take to recover *without* abruptness from the immediate effects of such disturbances. The facilities enjoyed by Messrs. A. French & Co., for the manufacture of these springs are unrivaled on this continent, both for the perfection of mechanical appliances and machinery used, the material employed as also the patent hot compressed bands, and the principles of construction, all combining to evolve a product, which for thorough excellence with durability, elasticity and uniformity is so far matchless.

The plant of the firm is located on the corner of Twenty-First and Liberty streets, and is one of the most extensive establishments in the city; the buildings, which are substantial and appropriate, covering an area of 100x265 feet. Here are employed 85 skillful mechanics, whose earnings amount to not less than \$5,000 per month, the annual business transacted by the house being about \$400,000 and engrossing three-fourths of all the trade in elliptic springs in the United States, besides making large exports to England, Australia and the South American States. At the Centenary Exposition of 1876, the highest award with medal was conferred upon the work of this firm, the diploma reading, "For good designs, excellence of workmanship and material, uniformity of action and durability"—words applied to no other similar exhibit. Of the members of the firm, Mr. French is a native of Ohio, where he was born in 1823, removing permanently to Pittsburgh in 1864, since which time he has been active in the promotion of the enterprise with which he is so closely identified. Mr. Calvin Wells was born in Genesee Co., New York, in 1827, and has been a resident of this city for thirty-two years, during which period he has been engaged in developing the manufacturing interests of the community. The character of the firm is too widely known to require any comment here; it is one of the vitalizing institutions of the city, and as such, has acquired a place in the consideration of the public to which it is most equitably entitled.

JOHN J. SHADE,—Bookseller, Newsdealer and Stationer, 3706 Butler St.

Mr. Shade is doing a prosperous business of about \$5,000 per annum. The business was first started by Geo. Shade, father of the present owner, in 1862; at his death, in 1872, the store came into the hands of the present owner, John J. Shade, who was born in Germany in 1845, came to Pittsburgh in 1855 and learned the printer's trade. He served 9 months in the 136th Regt. Pa. Vols., and was engaged in some very important battles. Mr. Shade is a gentleman possessing business qualities of a high order, doing a very prosperous trade in his neat and well arranged store room, is honored and respected by all who know him for his strict integrity and high character. Shade is known throughout the entire portion of the city in which he does business.

THE MORRIS PRINTING HOUSE,—1311 Carson St.

This establishment was founded by F. D. Morris, Esq., its present proprietor, in 1871, and has been steadily increasing in public favor and extending its business ever since. It has excellent facilities for doing every variety of Commercial Job Printing, Ruling, etc. The Morris Printing House occupies a three-story brick building 20 feet front by 40 feet deep. A neat little engine and upright tubular boiler are used, and from four to seven men are employed. Mr. Morris was born in Philadelphia in 1854 and came to this city in 1867. As a printer he has displayed a taste which has made his work popular. He is a refined and cultured gentleman and enjoys universal respect and esteem.

M. RISACHER,—Dealer in all kinds of Meats, Butler St., bet. 36th & 37th Sts.

On Butler street, between 36th and 37th streets, will be found the well-stocked, neatly kept and popular Meat Market of the genial and clever young gentleman Marcel Risacher, where he engaged in the meat business in August, 1877, with very small capital, which, by his agreeable manners and by keeping the finest quality of meats, has from the start steadily enlarged and extended. He is now in the enjoyment of a very large and prosperous trade. His establishment is fitted with a very complete ice-house and refrigerator, in which he is able to keep a large stock of fresh meat in prime condition at all seasons. Mr. R. was born in France in 1854 and came to the United States in 1871. Working for a few years at the butchering business, saving his earnings, which, in a short time supplied his capital with which to embark in business for himself, in which, though quite young and having but recently started, he has achieved a very notable success.

M. SIPPEL,—Merchant Tailor, Hats, Caps & Gents' Furnishing Goods, 4210 Butler St.

Mr. Sippel will be found at No. 4210 Butler street, where he has a good stock of Hats, Caps, Gent's Furnishing Goods, with the latest styles of Cloths for Custom Work. To his Merchant Tailoring establishment he devotes particular attention, enjoying a high reputation and guaranteeing perfect fits. Mr. S. commenced his present business with a capital of \$75, in 1875, having, through unfortunate real estate investments, previously lost a considerable fortune. With this small capital, backed by energy and self-reliance, he has succeeded in building up a good trade. He was born in Germany in 1834; came to the United States in 1852; learned the tailoring trade in the old country and has worked at it ever since. Mr. S. is now doing much of his own work with his own hands, doing it well, thus gaining a high reputation.

S. STUTZ,—*Mining and Mechanical Engineer, No. 96½ Fourth Av.*

Mr. Stutz is of French parentage, but was born near Strasburg, Germany, in 1833. He graduated with high honors at the celebrated Saarbrück College in 1854, and in the following year entered the mining school of that city, from which he graduated in 1859. Determined to become thoroughly proficient in the profession of his choice, he afterwards entered the Bochum Mining School, where he graduated in a special course in 1860. During the Franco Prussian War he served as a French Soldier in the National Guards, participating in all the engagements in which that veteran organization took part, until the close of the war. He was in Paris during the reign of the commune and came to the United States in 1871. The first two years of his residence in this country he held the responsible position of Civil Engineer of the city of Massillon, Ohio. Relinquishing that position he entered the office of the Westinghouse Air Brake company of this city, as draftsman and engineer. Five years ago he engaged in business for himself and opened an office at No. 96½ Fourth Avenue. Mr. Stutz is a thorough practical mining and mechanical engineer and is prepared to furnish plans and estimate for opening and working mines, for inclined planes, wire rope tramways, hoisting machinery, etc., making a specialty of the erection of patent coal and ore crushing and washing machinery and coke ovens. He is now devoting his attention, principally to the development of his own patents, on Coal Washing Machinery and machinery for separating impurities of all kinds from the carbon of coal previous to its use or manufacture into coke. The benefits to be derived from the use of a pure fuel in metallurgical operations are evident to proprietors of blast furnaces and others engaged in similar business, and the inventions of Mr. Stutz, which are secured by letters patent, dated respectively March 20, 1877, August 14, 1877, Dec. 18, 1877 and May 14, 1878, are believed to be as near perfection as can be attained for this purpose. Many of his coal crushing and separating machines are in operation in Pittsburgh and through the Bituminous Coal regions of Western Pennsylvania, several near Chattanooga, Tenn., one in Alabama and others in different portions of the United States, all of which give the most perfect satisfaction. Companies wishing to erect machinery or to ascertain by practical test the coking and other qualities of their coal will receive prompt attention by calling on or addressing, Mr. S. Stutz, No. 96½ Fourth avenue, Pittsburgh. Pamphlets giving full information as to the working of his machinery and the benefits resulting therefrom will be furnished.

THOS. WIGHTMAN & CO.—*Fruit Jars, Bottles & Window Glass, 43 Wood St.*

The importance of the glass trade to Pittsburgh and its great influence upon the prosperity of the community has been a very frequent subject of comment, but it is not till each separate venture in this manufacture is examined that the true magnitude of the industry is understood or appreciated. Among those houses most largely engaged in making Bottles, Druggists' Glassware, Jars and Window Glass, that of Mr. Wightman and Co. may justly be accorded the highest rank both with regard to the quality of the product and its value. Part of the plant of the firm, which is located on the South Side, 34th ward, is historically connected with the inception of the manufacture of glass in this city, having been established by Col. O'Hara in 1796, who prosecuted the business for some time, giving place to Frederick Lorenz, Sr., who immediately preceded Wm. McCully & Co., of which firm Mr. Thomas Wightman was a member. At his date, about 1834, the facilities were limited to one factory, and a product of \$40,000 yearly, against a group of four factories at the present time, in the 24th ward, while in the 36th ward are located the Eclipse Glass Works, bought by Mr. Wightman, of this firm, in 1871. These works were erected by Fahnestock, Albee & Co., but not operated to any great extent, till they came into his hands. They cover an area of over two acres, and in the jar season are also almost entirely devoted to the manufacture of the mason jar. The house is doing an annual business of \$200,000 at the unprecedentedly low prices that govern the market. The two plants now occupy about ten acres in area, and employ a force of 300 skilled workmen, requiring a weekly disbursement of from \$2,500 to \$3,000. The products in Window Glass have not been surpassed in quality by any contemporaneous concern in this country, and from continued improvements in this branch it is reasonably anticipated, that within a very limited time the Plate and Window Glass of this house will equal in every respect, luster, clearness, strength, etc., the product of French factories. Added to the immense products of the house, they also handle the celebrated Bee Puaw American Plate Glass, being the exclusive agents for this section of the country. Progressive, enterprising and liberal, it is too much to assert that no firm in Pittsburgh has done more to promote the welfare and industrial thrift of the community, than this well known house, offering in their products pronounced inducements in prices and quality.

R. B. JEFFRIES,—*Manuf'r, Wholesale & Retail Dealer in Cigars, 4006 Butler St.*

The establishment of Mr. Jeffries is located at 4006 Butler street, where he engaged in the business of manufacturing cigars in 1877. Mr. J. employs in his factory six hands, keeping them fully employed all the time, turning out over a half-million cigars annually. He enjoys a good trade and is now doing a large and prosperous business, both wholesale and retail. He was born in Virginia in 1837, was left an orphan when quite young, having his own way to make in life. He came to Pittsburgh in 1854, and worked at his trade here in different places, until by close economy and industry having accumulated some capital, engaged in his present business, in which he has been very successful and is now prospering.

M. V. NASER,—*Clothing, Merch't Tailoring, Gents' Furnishing Goods, 4004 Butler St.*

Among the most attractive and best stocked stores on Butler street is that of M. V. Naser at No. 4004 Butler street. He occupies a large, beautiful room, with very handsome show windows that are always decorated with the most tempting display of the latest novelties and most attractive goods in his line. Mr. Naser opened his store in 1878, and already he is doing a prosperous business. Fashionable young gents can always be fitted out at this popular place in the most complete and stylish manner. Mr. N. makes a specialty of Merchant Tailoring, employing the most fashionable and skilled cutters and workmen, and warrants neat fits. Mr. N. was born in Pittsburgh in 1848. He is a son of John Naser, one of the first settlers of Lawrenceville, who used to keep the hotel near the car stables and was proprietor of the old bus line that ran between L. and the city prior to the building of the Citizen's Pass. Railway. He was raised in this part of the city and since childhood has witnessed its growth. He kept tavern opposite carstables twelve years, previous to his present business, which he sold out. Mr. N. is a young gentleman of energy and agreeable manners, which, with his extensive acquaintance in the community, is rapidly increasing his business.

VOELKER & BRUGGEMAN,—*Merchant Tailors. 4002 Butler St.*

The handsome establishment of this enterprising young firm is at No. 4002 Butler street, where the business was started in 1868 by Wm. Sunderman, selling out to present firm in 1879. They occupy a large, handsome store room, 25x60 feet in size, in which they carry a complete and finely-assorted stock of all the latest and most fashionable patterns of cloths, vestings, etc., to the amount of \$5000 and are doing a fine business, having a very fashionable trade. Mr. August Voelker was born in Germany in 1850; came to the United States in 1868, having learned his trade in the old country. He engaged with Mr. Sunderman at this present location and worked for him until succeeding to the business of his former employer. Mr. Fred. Bruggeman was also born in Germany in 1851; came to the United States in 1868; worked at Medendorp's Clothing House on Fifth avenue; was afterwards with Messrs. Girdling & Jones for a number of years, leaving there to embark in his present enterprise.

HIRSCH BROTHERS,—*Wholesale Cigars and Tobacco, No. 42 Sixth St.*

Among those firms that are closely identified with the Tobacco trade in this city must be noted that of Messrs. Hirsch Brothers, wholesale dealers in fine Cigars and Tobacco. Established in 1874, by the same partners, Isaac and Henry Hirsch, the business at first was conducted with but a very limited capital. The house is now transacting a trade, ranging over Pennsylvania and Ohio, to the amount of from \$40,000 to \$50,000 annually. The premises now occupied are 22x60 feet in size, and located at No. 42 Sixth st., next to the corner of Penn av. and Sixth st., the most prominent thoroughfares in Pittsburgh. Numerous assistants are engaged to aid in the manufacturing department of the trade, and a large and very well selected stock kept constantly on hand. Both members of the firm are natives of Germany; Isaac having come to this country in 1855, at the age of 15, and acquired the trade of cigar maker in New York, removing to Oil City ten years later, and in 1874 to this city. Henry, who accompanied his brother to the United States, was 6 years old. They are energetic, reliable and responsible self-made men.

GALE FRENCH,—*Surgeon Dentist, No. 115 Penn Av.*

As a practitioner in one of the industrial professions, Dr. Gale French is entitled to consideration in a volume devoted to a compilation of such interests in this city. A native of Maine, born in 1845, Dr. French studied under the most celebrated dentist in New York, and graduated at the Dental College of New York in 1870. Two years later he removed to this city. Beginning as a complete stranger and without the aids to a practice that a long residence affords, Dr. French compelled recognition from the beauty of his work, the care manifested in all cases, and the confidence inspired by thoroughness in every department of his avocation. As a natural result, he soon acquired and still maintains a high degree of popularity. In the finer artistic and surgical branches of his profession, Dr. French is known not only in this city and its environs, but with the profession throughout the West generally.

AUGUST PIEPER,—*Boots & Shoes, 3704 Butler St.*

At No. 3704 Butler street, in one of the largest, finest and best arranged rooms on the entire street, with the largest, most complete and varied stock of Boots & Shoes in the East End, Mr. August Pieper will be found ever ready to greet with a pleasant reception any number of friends and patrons to his well-known establishment. The business was started at this point three years ago, coming into the possession of Mr. Pieper some time after; since then by his enterprise and business ability he has been doing a very large and steadily increasing business. No establishment in this part of the city enjoys a higher degree of popularity or is doing a better or more prosperous business. The popularity of the proprietor and high esteem in which the establishment is held is fully merited. Mr. P. was born in Germany, and came to the United States 11 years ago. He learned the trade of shoemaking, at which he worked for some years, accumulating by industry his own capital, which has enabled him to embark in business in an extensive manner, affording him a broader field for his business qualifications.

OTTO KONSTANZER,—*Bakery, Confectionery, Ice Cream Parlors, 4014 Butler St.*

Mr. Konstanzer's excellent establishment is large, handsomely arranged and elegantly stocked with confectionery, etc. The Ice Cream Parlors are finely fitted up—a Bread Bakery is also carried on. He keeps one wagon engaged in delivering bread. Mr. K. started his business in 1873 with small capital, increasing and enlarging as he became able. He was born in Germany in 1849; came to the United States in 1861, working at his trade as confectioner for a time, afterwards was pastry cook at the Union Depot Hotel—burned during the great riot—for five years, leaving there to embark in present business, accumulating by his industry his own capital.

MANNING HOUSE,—*Chas. Manning, Proprietor, Cor. Penn Av. & 11th St.*

As one of the few and favorite Hotels in the city, conducted jointly upon the European and American plan, the Manning House is deserving of special mention. More particularly on account of its establishment in 1846 and consequent identification with the solid and substantial institutions of the Iron City. In the early part of the present year Mr. Chas. Manning assumed control of the house and infused life into the business by his wide experience and attractive characteristics. New improvements were introduced, the hotel re-furnished, an excellent bar and restaurant attached and every modern convenience supplied for the comfort and enjoyment of the guests, who are at liberty to avail themselves of either the European or American plan. The building is spacious, 45x80 feet, four stories high, containing ample and elegant accommodations, and is in every way a desirable place to stop or reside permanently. Mr. Manning, the enterprising host, is a native of this city, he has pursued his present vocation for 11 years, and has represented his section of the city in councils—always being allied to the industrial prosperity of the community—fostering the same to the extent of his influence. As a host Mr. Manning is unrivalled and is perfectly aware of how to keep a hotel.

J. A. McKEE & SONS,—*Oil Refiners & Coopers, Office 56 Fifth Av., Works 49 St.*

This firm was first established in 1858, under the title of McKee, Hocket & Co., which continuing until 1867 was supplanted by the present firm, consisting of J. A., H. W. & J. R. McKee, the senior member having resided in Pittsburgh since 1845, and his sons being natives of this city. The "Liberty Oil Works," which is the name of their refinery, is ranked in capacity with and will compare favorably with any similar manufactory in Pittsburgh or along the Allegheny Valley, and is capable of producing 600 bbls. of refined oil per day, at a fire test of 110°. The standard and exclusive quality manufactured by this firm. From 125 to 130 men are constantly employed in the various operations of refining, and in the cooperage where all the barrels used in the business are made by the most perfect and ingenious appliances. The value of the entire plant is estimated at \$175,000, the products being exported entirely to European and other countries. The increasing importance of the oil trade, and especially the continually growing foreign demand, has been promptly taken advantage of by this house.

FRED. SPREEN,—*Merchant Tailor, 1318 Carson St., South Side.*

Mr. Spreen's handsome and popular Merchant Tailoring Establishment occupies a large three-story building, and is well known as an emporium of fashions for gentlemen. The store contains at least \$1,000 worth of goods ready to be made up into fine fitting garments, and is the outgrowth of a small beginning made a few years ago. Mr. Spreen employs three and four workmen at all times, but many more during the busy season. His specialty is custom work in which his reputation for fitting is not surpassed in the city. Mr. Spreen was born in Germany, in 1835, and came to America in 1859; as a man he is prompt, correct, reliable and agreeable.

ARCHIBALD WALLACE,—*Wholesale Grocer, No. 295 Liberty St.*

Under various changes in style of firm, the grocery house of Archibald Wallace has been in existence since 1843, when it was founded by Mr. Henry Lambert. He conducted the business in his own name until 1846, when Mr. John Shepton became a partner, and the firm name became Lambert & Shepton. For a period of fifteen years the partnership continued, and the house obtained a wide-spread reputation throughout this section. In 1861 Mr. Archibald Wallace became a partner in the firm, and the style became Lambert, Shepton & Co., and continued as such for five years. In 1866 Mr. Lambert retired, having disposed of his interest in the business to Mr. Wallace, and the title of the firm again changed, and it became Shepton and Wallace, remaining as such until 1876, when Mr. Shepton retired, and Mr. Wallace became sole owner and proprietor. During the entire period of its existence, under the various changes of administration, this house has always maintained a prominent position and a high reputation for business integrity and enterprise, and was largely instrumental in developing the grocery trade of Pittsburgh. Previous to the panic and the consequent depression in trade this house transacted an annual business of \$1,000,000, and that too without the aid of traveling salesmen, depending entirely on their merits, and the reputation they had acquired among dealers in Western and Middle Pennsylvania, Ohio and other States in which their trade was located. Latterly Mr. Wallace, owing to the general depression in all branches of trade, has had no desire to push his business, and his average annual sales will now amount to about \$100,000. He occupies the entire four floors of the spacious ware-house, 20x120 feet, at No. 295 Liberty st., carrying a general stock of groceries and articles pertaining to that line, valued at about \$20,000, and employs three assistants. He has a large local trade, and supplies many of the leading grocers throughout Western Pennsylvania and Eastern Ohio. Mr. Wallace also transacts a large and very considerable brokerage and commission business in the leading articles pertaining to his line. Mr. Archibald Wallace is a native of Ireland, born in 1830. He has resided in Pittsburgh since 1848, and has been actively engaged in the grocery business since boyhood, and prominently identified with the wholesale trade of the city.

JACOB KELLER,—*Wines and Liquors, No. 190 Smithfield St.*

Jacob Keller is perhaps as well and favorably known as a direct importer of and dealer in pure Wines and Liquors as any one in Pittsburgh engaged in like pursuits. The house was established, under the firm name of Keller & Paulin, in 1853, becoming as at present two years later. Mr. Keller is a native of the French province of Alsace, was born in 1825, accompanying his parents to this country when but 12 years of age. For 41 years he has been a resident of this city. Importing direct German, Spanish, Italian and French Wines, which are his specialties, it is safe to assert that none of these choice products leave the establishment of Mr. Keller other than in their pure condition, free from blemish as nature will permit. The premises occupied and owned by Mr. Keller consist of one large and handsome brick edifice, located as above, 20x110, four stories high, and a cellarage adapted purposely for the business, which is carried on in a wholesale and retail way, stock ranging from \$6,000 to \$10,000, and an annual trade of from \$10,000 to \$12,000. Orders for goods from a distance should be accompanied by check or P. O. Order, and in every case satisfaction will result.

WM. MILLER,—*Duquesne Forge, Cor. 1st and Duquesne Way.*

The establishment of Mr. Wm. Miller is entitled to a prominent place in the recorded annals of this city, so intimately allied as it is, to those enterprises which conduce so much to the general welfare. A native of Scotland, where, upon the banks of the Clyde, he acquired a practical and operative knowledge of iron forging in all its departments, he removed to this country while a young man, and continued his career in the same vocation at West Point, on the Hudson. Being induced subsequently to visit this city, his thorough knowledge of the business, and keen discernment attracted the attention of our large manufacturers, among whom was Henry Lloyd, Esq., (now deceased) induced him to settle here permanently. With the co-operation of the gentleman just named, Mr. Miller established the Duquesne Forge in 1862, which at once became noted for the size of its forgings, and the solid perfection of its work. With such a reputation the business of the concern rapidly increased, the trade extending to all parts of the country, and its resources and facilities constantly augmenting. The forge now possesses some of the finest and heaviest machinery in the State, consisting in part of one five-ton hammer with 6 foot stroke, one two-ton hammer with 3½ foot stroke, one storm tilt hammer of 1500 lbs., together with shears, sloter boring machine, lathes, planes, &c., &c., with four large furnaces and four forging fires. Forty hands, all skilled mechanics, are employed in these works, requiring an annual disbursement of nearly \$40,000. The building occupied by the establishment is one of the best in the country, admirably located, with a view to convenience in shipping, both by river and railroad. Heavy forging for steamboat and locomotive machinery, bridges, and large pieces of mechanism are made a specialty, and in the execution of such work this house has few rivals and no superiors. In the iron trade this Duquesne Forge has a celebrity that is not only creditable to itself, but inures greatly to the advantage and prosperity of this, the well named "Iron City" of America.

C. KANE,—*Scrap Iron, Steel and Metal, Duquesne Way, below 6th St.*

Pursuing an industry contingent upon the vast manufacturing and producing interests of the Iron City, Mr. Kane is entitled to a record among those who are identified with the progress and development of Pittsburgh. Born in 1846, and a native of Ireland, Mr. Kane immigrated to this city in 1863, and, after a thorough acquisition of the business, established himself in 1871, as an iron and metal dealer. From that time to the present he has met with no small share of success. His relations have been with the largest and best houses in the country, who, appreciating the manner in which he conducts his business, and the absolute reliance inspired by his straight forward course, have not forgotten to demonstrate that confidence. In all departments of the Scrap Iron, Steel and Metal business, Mr. Kane is perfectly conversant. He handles but the best grades of stock, and makes Old Rails, Wheels, Axles, Car Springs, and No. 1 Scrap a specialty; also in connection with the above sells Pig Iron, Blooms and Bar Iron on commission. Commencing business with a limited capital, Mr. Kane has augmented his yearly business to from \$50,000 to \$75,000, and is an active co-operator in the general industrial welfare of the community.

A. H. LESLIE,—*Insurance & Real Estate Agent, 4120 Butler St.*

The enterprising Real Estate and Insurance Agent, Mr. A. H. Leslie, has his office at 4120 Butler street, where he established himself in 1874, remaining at the same place ever since. During the five years elapsed he has succeeded to a large and prosperous business in insuring, renting and selling property, collecting rents, etc.; he now has entire charge of upwards of \$400,000 worth of property which he manages with ability and to the satisfaction of those interested. He is a young man of high character and great enterprise, and since starting in the business has established a reputation for integrity and business ability. He was born in Westmoreland county, Pa., in 1853, came to Pittsburgh in 1870 and learned the carpenter business, at which he worked but a short time; he then with some misgivings opened his real estate office at his present location, being an entire stranger without means or friends, but by close attention to his business, upright and honorable dealing, he soon established his business on a solid basis.

W. H. MAXWELL,—*Glass Labels, Glassware, &c., 83 & 85 27th St., S. S.*

The manufacture of Glass Labels for druggists jars and bar bottles, glass tubing for underground telegraph lines and paper weights, etc., is a branch of industry comparatively new to this section, but one that is assuming considerable importance; the only establishment engaged in this branch of business in Pittsburgh is that of W. H. Maxwell, at Nos. 83 and 85 27th street, South Side, which was started by Messrs. Maxwell & McAfee, in 1875 with moderate capital. In 1876 Mr. McAfee retired and Mr. Maxwell became sole proprietor. In order to meet the demands of a rapidly growing trade his capital was increased and the works enlarged. He finds a ready sale for all the goods he can turn out and as a consequence is required to carry a very heavy stock, his principal investment being in the raw material. He occupies a building 50x100 feet in size and employs 15 hands, using a two-horse power engine and boiler. The works are kept running constantly to supply the trade, which extends all over the country both east and west. Mr. Maxwell is the inventor of a paper weight which he is now manufacturing and for which there is a large demand. They are of solid glass and can be made with any name or advertisement desired and placed in the centre so that it will remain as bright as when new, as long as the weight endures, which, with ordinary usage, will be to the end of time. The weight makes a handsome piece of office or desk furniture. By the same process handsome door knobs and various other useful and ornamental articles are made. Other articles of which this establishment makes a specialty are the manufacture of convex photograph glass and cylinder oil cups. All of these goods he is prepared to furnish in any quantities desired at very low rates. Mr. Maxwell was born in Wellsburg, West Va., in 1834, and came to this city in 1867, where he has remained ever since. He first embarked in business at his present location, and by sheer industry, untiring energy and honesty, he has established a trade which will in time place him in the front rank of business men.

DR. J. O. FLOWER,—*Dentist, 140 Penn Av.*

The dental parlors now occupied by Dr. J. O. Flower, were opened in the year 1839 by Dr. Robert Vandervort, who was one of the first three dentists who came to this city to enter into the practice of dentistry. By strict attention to business, and by doing first-class work, Dr. Vandervort succeeded in working himself to the head of the dental profession in this State. In the year 1859 the present proprietor commenced the study of his profession with Dr. Vandervort. By the merest accident was Dr. Flower thrown into the position which has since made his name honored among those of his profession. He had only the advantages of a common school education, and it was while he was attending a commercial college in this city that he became acquainted with Dr. Vandervort, who offered him a position in his office, which was gladly accepted. Here he remained until the year 1861, when he entered the army. After his time of enlistment had expired and he was honorably discharged, he again returned to this city. Immediately upon his arrival here, he was tendered the position of assistant to Dr. Vandervort, which ultimately terminated in his becoming a partner. In 1873 Dr. Vandervort retired from the practice, and Dr. Flower has since practiced his profession with marked success, forming an extensive and highly cultivated acquaintance. His office is located on one of the principal streets in the city, and is known throughout the limits of both the cities of Allegheny and Pittsburgh, and the surrounding country. Upon entering his operating room, one is interested in the many articles of usefulness that are of his own design and mechanical skill, indicating the natural inclinations which have led to his success in the profession.

JARVIS & ADAMS,—*M'frs. Domestic Hardware, Head of Diamond St.*

This firm are large manufacturers of all kinds of domestic hardware and light iron castings in the most artistic manner and after the best patterns. Founded in 1870 by S. Jarvis & Adams, it assumed its present name in 1872. They now occupy a main building of three floors each 50x114 feet, also an L in the rear nearly half as large again besides the basement floor which is used as an engine and cleaning room. From 50 to 60 hands are constantly employed with a pay roll running from \$400 to \$500 per week. The principal specialties of manufacture are axel boxes of all sizes and descriptions, embracing between three and four thousand different patterns; patent moulded seamless thimble skeins, the only skein that can be made perfectly accurate and interchangeable. A large variety of patent pump trimmings for wood pumps of all sizes and descriptions, and plugs or balls for welding gas pipes. They also have a large number of very valuable patents, among which may be mentioned their great labor-saving machine for moulding, which requires no experienced workman, any common workman being able with this machine to accomplish twice as much and do better work than the most experienced workman by the ordinary method. It is the invention of Mr. S. Jarvis Adams, one of the firm, and enables them to mould castings to the hundredth part of an inch, which is of great value in that line of work where uniformity and great accuracy are required, such as plugs or balls for welding gas pipe, requiring no grinding or finishing whatever. They are at present melting between five and six tons of metal per day. Stephen Jarvis was born in Albany, N. Y., in 1807, coming to Pittsburgh in 1844, where he has since lived. S. Jarvis Adams was also born in Albany Co., in 1837, and has lived here since early childhood. Both were formerly connected with the old Pittsburgh Novelty Works. The firm is one of the most prosperous in our city, their past yearly sales being from \$50,000 to \$75,000 and rapidly increasing.

EXCELSIOR PLANING MILLS,—*W. F. Richardson, Steamboat Joiner, 48 Water St.*

For twenty-one years engaged in the above occupation, Mr. W. F. Richardson has identified himself pretty thoroughly with the productive classes of the community, and has acquired a high position to which he is fully entitled. In addition to his special work which is that of a cabin builder and ship builder, Mr. Richardson carries on an extensive Planing Mill known as the "Excelsior," and manufactures and deals largely in flooring, weather-boarding, sash and door mouldings, &c. The premises occupied consist of one ample building 45x160 feet, containing a full equipment of the best machinery which is operated by a powerful double piston steam engine, the invention of the proprietor and known as Richardson's patent. Here are employed from 25 to 30 hands, necessitating an average outlay during the year of from \$150 to \$225 per week. Mr. Richardson is a native of Allegheny county, but was reared in Washington county, returning again to this county and settling in Pittsburgh in 1845. He has by the model excellence of his work attained a reputation that has extended his trade along the Ohio, Mississippi and Missouri rivers and their tributaries, and placed him at the head of his avocation, where he enjoys the confidence of the community and the esteem of the general public with which he has been identified for more than a quarter of a century.

E. P. THOMAS,—*Groceries & Provisions, Etna, Pa.*

For Groceries and Provisions in Etna, call on E. P. Thomas, Esq., who started business several years since and is now doing a yearly business of about \$4,000, carrying a stock of \$500. He occupies a two-story frame building 32x35 feet, with a general stock of groceries and provisions, foreign and domestic fruits, canned goods, wooden and willow ware, queensware, lamps, glassware, etc. Mr. Thomas was born in Wales in 1827, and came to Pittsburgh in 1843, he subsequently located in Etna, where he was elected Justice of the Peace in 1868, for a term of five years, and in 1877 was re-elected to the same office for a like term, which will expire in 1882.

FORT PITT COAL CO.—Miners and Shippers of Gas Coal, 337 Liberty St.

The amount of capital invested in the coal business in and around the Smoky City is not less than fifty million dollars, and the number of miners employed in 158 collieries represented in this immediate vicinity reaches nearly 17,000. Prominent among the many firms and corporations engaged in this important branch of industry is the Fort Pitt Coal Company, incorporated under the mining and manufacturing laws of the State of Pennsylvania, with a capital of \$300,000. This Company was chartered February 14th, 1865, and the present officers and directors are as follows: President, S. McCrickart, Esq.; Treasurer, S. Beymer; Clerk, W. M. Heyl; Manager, J. E. McCrickart. Directors—S. M. McCrickart, Geo. S. Head, John Hays, Lucius Osgood, Wm. Rinehart, R. F. Bauman, B. L. Fahnestock, James Montgomery and Martin Heyl. This list of names comprises many of Pittsburgh's most honored and successful merchants and business men, and shows that the affairs and interests of the Company are entrusted to thoroughly competent and reliable managers. The mines of the Fort Pitt Coal Company are located on the main line of the Pittsburgh, Cincinnati & St. Louis (Pan Handle) Railroad at Fort Pitt Station, ten miles west of Pittsburgh. This road and its various connections, both east and west, furnishes facilities and advantages for shipping coal to all parts of the country with promptness and despatch. In fact, by no other means could be reached with equal celerity and economy the great coal-consuming districts of Pennsylvania, New York, Ohio, Indiana, Illinois, Iowa, Missouri, Minnesota, Wisconsin and Michigan, and, via the great lakes, Canada. To the trade in Pittsburgh their coal is delivered on their own cars direct to the various works and retail merchants which they supply, thus effecting a great saving in transportation. The prominent feature of the business of the company (next to the superior quality of coal furnished) is "promptness" in filling all orders, however extensive, at the shortest possible notice. It is now generally conceded that the bituminous coal procured from the great Pittsburgh vein is the most satisfactory for manufacturing illuminating gas and it not infrequently occurs that an inferior and worthless article is shipped abroad under the name of "Youghiogheny" coal by unprincipled dealers. The Fort Pitt Coal has never been sold under any other name, and in their dealings with their numerous customers, the Company has always furnished a first-class and reliable article of Gas Coal without any fictitious name attached. The coal mined by this Company has been thoroughly tested by some of the most competent gas managers and analytical chemists of the country, and has always been pronounced of the very best quality. It has been extensively used in Pittsburgh and throughout the West by gas companies, rolling mills, foundries, and, in fact, by an unlimited class of consumers, fully demonstrating that it has been appreciated. With an experience of over fifteen years in the coal business and with their unrivaled facilities, the officers and directors feel confident that they can furnish the various grades and best qualities of coal, such as cannot fail to give entire satisfaction. Their prices, which of course are always subject to variations in accordance with the advance or decline of the cost of mining, are always as low as will be consistent with a safe and legitimate business. The office of this Company is located at No. 337 Liberty street and their post office address is lock-box 314, Pittsburgh.

LEE S. SMITH,—Dental Depot, No. 52 Sixth St.

There are other enterprises, apart from iron and glass, that may not be overlooked, though perhaps not so conspicuous, which add no little in the aggregate to the general sum of Pittsburgh's prosperity. Of these an important feature is the department of Dental Goods, prominent among which is the establishment of Mr. Lee S. Smith, of whom a few words may not be inappropriate in a publication designed to reflect the condition of Pittsburgh and its resources. Mr. Smith was born at Cadiz, Ohio, in 1844. He came with his family to Pennsylvania at an early age and in his eighteenth year joined the army in the 101st Reg't Pa. Vol's. At the close of the war he selected the profession of surgeon-dentist, and after two years' study graduated as such; but abandoning active practice, he founded his present business in 1866, continuing in it ever since with marked success and increasing resources. Mr. Smith is not only widely known in connection with his immediate vocation as a dealer in every conceivable article and appliance or piece of mechanism known to modern dentistry, but is perhaps still better recognized as one who has ever taken a prominent position in public movements tending to the good of the community at large, or the greater harmony of social relations. As a soldier or civilian, in personal or public capacity, Mr. Smith has exhibited certain traits of character that have endeared him to his friends and secured him the high consideration of the community. With no pretence, and an undeviating adherence to fixed principles, Mr. Smith has, by little effort other than the natural force of mind, acquired a business and social standing that augurs much for his future career.

KEYSTONE BOILER FORGE & ANVIL WORKS, WM. MANCHESTER & SON, 28th and Railroad Sts.

This enterprising and successful firm commenced the manufacture of Boilers in 1871, and some time afterwards added the Forge and Anvil branches to their business. Wm. Manchester was born in England in 1819 and learned the trade of a boiler-maker before coming to America. In 1840 he emigrated to the United States and secured work at whatever he could find to do. His skill as a boiler-maker, however, was soon discovered and he had all the work he could do. It may be interesting to note that Mr. Manchester did the first boiler repairing for the Pennsylvania Railroad Company. He has been connected with various boiler manufacturing establishments in Pittsburgh, but having by his industry and economy amassed sufficient capital to commence business for himself, he did so, and his success has verified the wisdom of his course. Manchester & Son's works occupy a building 45x120 feet. Their trade is large and distributed over the whole country and their work bears the highest reputation, both for the excellence of materials employed and the soundness of the workmanship. In the special branch of work to which this reliable firm give their attention, there is to be found no similar establishment enjoying a higher reputation for superior work. The Anvils and Tools made by these gentlemen are equal if not superior to any other make of this or any other country.

STEEL, LANE & CO.—Produce Commission, No. 202 Liberty St.

Pittsburgh being one of the best markets in the country has given great prominence to the General Produce Commission business. Among those firms that are considered as most prominent and influential in the business are Messrs. Steel, Lane & Co., the individual members of the firm being E. T. Steel, J. D. Lane and John A. Jordan, and though associated under the present style and relations for about two years only, they severally had a prior experience in the business. All natives of Ireland, they came to this city many years since and have taken an active part in promoting the industrial prosperity of the city. As a purely Commission House, they are in daily receipt of consignments from Pennsylvania and contiguous States and are noted for the promptness of their operations and the success of their transactions. As a firm through which to reach a speedy market, Steel, Lane & Co. are highly esteemed as responsible and energetic men, receiving consignments for everything in the commission trade.

M. BREITWEISER,—Choice Groceries, Flour, Spices, &c., 131 Taggart St., Alle.

Situated on Taggart street, near the junction of Charles and Sarah streets and at the western terminus of the Pleasant Valley Passenger Railway, is the establishment of M. Breitweiser, who keeps constantly on hand a complete assortment of Groceries, Teas, Spices, Flour, Syrups, also Fine Bread, Cakes, Pies, etc. Mr. Breitweiser was born in Germany in 1849; came to this country and settled in Pittsburgh in 1861; was engaged in business there some time and removed from there to Birmingham in 1871. Removed from there to his present place in 1877. He is at present doing a business of \$12,000 per annum, with a stock on hand of \$2,500.

CHARLES S. SCOTT,—*Surgeon Dentist, 94 Wylie Av.*

This gentleman is the Son and former pupil of the celebrated surgeon dentist, Dr. Jno. Scott, who but recently retired from the practice of his profession in this city. Dr. Chas. S. Scott is entitled to a lengthy notice in this report, both from the position he holds as a scientific and skillful operator in his profession, and the many notable improvements he has introduced in the science of applied dentistry. He was born in Pittsburgh in 1843. Previous to attaining his majority he entered upon the study of his profession, under his father's direction, remaining under the tuition of this celebrated practitioner for 7 years; he then commenced the practice of Surgical Dentistry on his own account, spending many years in the various cities of the country, adding largely to his stock of scientific information by study and observation, and to his skill as an operator by constant practice. He returned to his native city in 1877, and established his present business. Dr. Scott is located at No. 94 Wylie ave. On entering the house the visitor is shown into an elegantly furnished reception room, where everything bespeaks taste and refinement. On the second floor are two operating rooms, while in the rear may be found the laboratory and manufactory, where six skillful workmen are engaged in turning out the specialties for which this establishment is celebrated. The operating department, as before mentioned, consists of two rooms; first, the extracting room, where all of the most approved appliances for extracting teeth may be found. The "anæsthetic" which is used here deserves special notice. The preparation, the doctor's own, supersedes laughing gas or anything of the kind in common use, and is perfectly safe, no case being on record where the slightest injury has resulted to the patient from its use. This is one of the rotatable improvements introduced by Dr. Scott in his practice. The second work-room, where the fine and delicate operations are performed, such as filling teeth, &c., is light and cheerful. Two model operating chairs are in use here, and are seldom empty. This sketch would be incomplete without a description of the two great specialties of this establishment, viz., capping natural teeth with Scott's patent porcelain and gold cap, and artificial teeth produced in exact imitation of the natural. The first is the doctor's own invention, and used only by him. By this process teeth too far decayed to admit of filling are covered with a cap, made to fit the teeth so nicely that they are worn with the greatest ease and comfort, while the process of decay is entirely arrested. The carving of artificial teeth in exact imitation of natural is probably the finest piece of work ever turned out by the profession. The manufacture of these teeth differs from the usual mode in that each tooth is made and set up separately when they are passed into the hands of the engraver, who carves the surface in exact imitation of the natural tooth, so that the upper and lower jaw fit into each other perfectly. The result is that the food is masticated in place of being crushed, as with the old style, and indigestion thereby prevented. Dr. Scott is the great specialist West of the Allegheny Mountains in the branch of applied dentistry. The doctor has a practice of \$20,000 per annum. The fitting up of his offices, laboratory, &c., the many fine and costly instruments requisite in a first-class establishment of this kind involved an outlay of \$5,000. Although only two years at his present stand, Dr. Scott enjoys the patronage of the best class of citizens, besides hundreds who come from various parts of the country. While there are few equally skilled there are none who occupy a higher professional, scientific or social position.

GARDNER BROS.—*Fire Brick, Tile and Furnace Blocks, and Clay Gas Retorts, No. 116 Smithfield St. Works—Lockport, Pa., and Mt. Savage Junction, Md.*

In the manufacture of Clay Gas Retorts and Settings, Fire Brick, Tile and Furnace Bricks, etc., the firm of Gardner Brothers occupy so prominent a position as to demand more than brief notice in this work. The business was established in 1864 by Wilson & Gardner, assuming the present status at the retirement of the former senior partner, the individual members of the firm now being James and William Gardner. The works of the concern are at Lockport, Westmoreland Co., Pa., and at Mt. Savage Junction, Md., as being immediately contiguous to the most copious clay supply known within convenient range, this material being particularly adapted to the purposes for which it is used, having a very high percentage of silica and alumina naturally combined in just the proper proportion to have an exceedingly high refractory nature, even when subjected to the most intense heat, and therefore particularly useful in the manufacture of Gas Clay Retorts and Settings, Furnace Blocks and Fire Bricks. This fact having been amply demonstrated by long experience and severe tests, has given the retorts of Gardner Brothers a celebrity that extends over the entire United States and Canada, and results in a very large trade. The Gas Companies of Pittsburgh and Allegheny are supplied with these products, and the demand is so great at times as to tax the resources of the firm to the utmost, notwithstanding the large capacity of the works, which are extensive. It should be specially noticed that these Retorts are made by hand, and derive from the process of manual manipulation, valuable qualities not otherwise developed or obtained. The Messrs. Gardner, in pursuing this enterprise with skill and determination, have done much to advance the industrial thrift of the community, and are accorded the general esteem of the public and the commendation so well deserved.

H. SMITH & SONS,—*Merchant Tailors, No. 98 Wylie Av.*

This concern was established by Henry Smith, the senior member of the firm, in 1848, and is one of the oldest and best known merchant tailoring establishments in the city. Mr. Smith started with a nominal capital, and is among the number of self-made business men who owe the position they have attained to native energy, perseverance and sterling business qualities. The business of the house gradually grew in importance until 1874, when the junior members, sons of the proprietor, were admitted, forming the firm of Henry Smith & Sons, which now ranks among the leading merchant tailoring houses, in this line, in the city, if, indeed, it can be equaled in popularity. The business transacted is strictly Merchant Tailoring, a small but select line of Furnishing Goods being carried to accommodate customers of the house. The building occupied, No. 98 Wylie avenue, cor. Federal st., is a handsome brick structure, having a frontage of 25 feet on the avenue, and extending back 80 feet. The salesroom, which occupies the entire first floor, and is lighted from both streets, is one of the most handsome and commodious rooms occupied by any firm, in this line, in the city. Here are displayed a large and elegant line of piece goods, embracing the finest foreign and domestic manufactured fabrics for gentlemen's suitage or separate garments, at bottom figures, and the workmanship has no superior in fits, style, or excellence. To those desiring these qualities no further comment is necessary. This concern is one of the oldest establishments of the kind in the city, and has long enjoyed the patronage of the most fashionable and best class of citizens. Twenty hands are employed, requiring a disbursement of \$200 per week. The trade of the house is principally confined to the city. Henry Smith, Sr., is a native of England, but has been many years a resident of the Iron City, and intimately identified with its business interests. Messrs. Jos. F. and Henry N. Smith are both natives of Pittsburgh. These gentlemen enjoy the same high social standing in the community at large that their house has always had in the business community.

THOMAS WILSON,—*Manufacturer of Taffy & Candies, 17 Federal St., Allegheny.*

The establishment of Mr. Wilson is located on the west side of Federal street near the Suspension bridge, and immediately adjoining the Coliseum. The building is a four-story brick and stands upon the ground where once was the old homestead and mansion of Col. Robinson, one of the pioneers of Allegheny. Mr. Wilson was born in Canada in 1842, and coming to this country in 1863, settled in New York. Becoming dissatisfied there he came to Pittsburgh and engaged in business on Wylie avenue, removed from there to 35 Locock street and in 1878 removed to his present location. His stock of candies and taffy are of the very best make, and command a large and ready sale. Mr. Wilson attends particularly to the manufacture of all his goods and they are excelled by none in the city. You will find here pure articles and prices as low as any house in the city. All orders by mail promptly attended to.

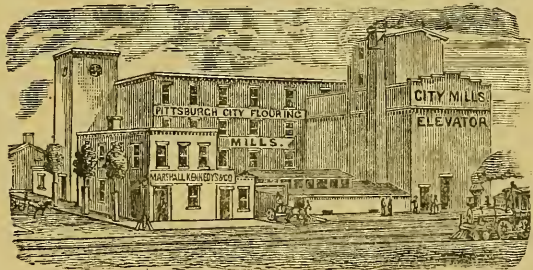
JOHN PEEPLES,—Wholesale and Retail Tobacco and Cigars, 3519 Butler St.

This extensive establishment, known as the "Lawrence Tobacco House" was originally founded by a son of the present proprietor with a wagon, and subsequently Mr. Peebles opened his present commodious quarters as a branch of the well known city house of R. and W. Jenkinson, one of the largest cigar and tobacco houses in Western Pennsylvania. After conducting the business in this manner for a while with marked success, Mr. Peebles relinquished his connections with the old house, and assumed the entire ownership and management of the establishment as an independent house, and has built up an immense and lucrative trade. He carries an average stock of \$10,000 or over, and keeps two wagons constantly on the road throughout Western Pennsylvania, selling and delivering goods. His annual sales from store and wagon will exceed \$100,000, and his business will compare favorably with that of any similar establishment in the West.

The life and services of Mr. Peebles, previous to engaging in his present line of business, are entitled to special recognition in a work devoted to the history of the industries of Pittsburgh. We append a brief sketch of some of the more important events. Mr. Peebles was born at Greensburg, in this State, in 1827. When he was but two years of age his parents removed to Pittsburgh, where he has since made his home. At an early age Mr. Peebles learned the trade of blacksmith with Mr. Poal in a little old log smithy on the corner of 1st and Liberty streets. For twenty years he worked industriously and continuously in the old Sligo Iron Mills of Lyon, Shob & Co., accumulating by economy and industry considerable money, which he subsequently invested in the oil regions, and, like many others, was successful only in losing the hard earnings of many years of toil in the slippery business. Returning to Pittsburgh he secured the position of superintendent of the old Cyclops Iron Works, afterwards consolidated with the Iron City Forge, and now known as the Union Iron Mills, which were directly connected with the Keystone Bridge Co. While yet engaged in the old Cyclops mill he commenced the manufacture of "T" beams, Channel and "T" bars, and the various shapes required in the construction of Iron Bridges, Roofs and Fire Proof Buildings. The successful manufacture of this class of goods in this city is largely due to the energy, ability and earnest endeavors of Mr. Peebles in this direction. In 1872 he resigned his position of superintendent of the Union Mills, and taking a portion of the old Coleman, Rahm & Co.'s mill to Erie, Pa., and adding to it he erected the Erie Rolling Mill, which he conducted successfully until 1875, when, owing to the general depression in the iron trade, he resigned, and came to Pittsburgh, embarking in his present business. To Mr. Peebles belongs the honor of having produced the first merchant bar iron ever made within one hundred miles of Erie. In the manufacture of iron for bridges, at the early period of its production here, great difficulty was experienced in cutting the various pieces to an exact length, owing to the uneven shrinkage caused by the impossibility of heating each piece to the same temperature. To overcome successfully this required the finest calculations and closest attention. In one contract of over 400 tons for the Rock Island Arsenal, Mr. Peebles was successful in filling the entire order in such a careful manner that not a single piece was rejected and not an eighth of an inch variation. Mr. Peebles and Mr. A. Kloman, general superintendent and business manager, were induced to commence a series of experiments in order to solve the problem of cutting the iron cold, so as to secure the desired accuracy, and the result was the discovery of the "Cold Saw," now universally used for cutting beams and bars of iron of any thickness to any desired length without heating. To these gentlemen the world is indebted for this great and important improvement, which was afterwards applied by them to cutting stone, and was the immediate precursor of the invention of the Diamond Stone Saw. Mr. Peebles is entitled to most creditable mention for ingenuity and enterprise, his intelligence and public spirit. He is a prominent member of the Baptist Church, and universally respected and esteemed by all who know him.

MARSHALL, KENNEDYS & CO.—Pittsburgh City Flour Mills and Elevator, Cor. Liberty and 15th Sts.

One of the oldest and most widely known firms in the milling business in this city, the house of Marshall, Kennedys & Co., is entitled to special mention in this work, as conducting largely to the general industrial thrift. The house was originally founded by Messrs. Preyam, Kennedys & Co., who established in 1852, and successfully conducted for many years the celebrated Pearl Mills, formerly situated in Allegheny, on the Pennsylvania Canal, and at the time of its erection considered the largest plant of its kind in this section of the State. This mill being destroyed by fire, in 1870, the business was removed to its present location, the firm changing to its present style, composed of A. M. Marshall and W. M. Kennedys, the former originally from Ireland, but a resident of Pittsburgh for 47 years, and the latter having been born in Allegheny City in 1844.



The existing plant of the firm is regarded as one of the best and most thoroughly appointed flour mills in the country, having a capacity for producing 400 barrels of choice flour per diem, and large quantities of corn meal, chop, &c., &c. The buildings are 100x167 feet, 5 stories high with an extensive elevator adjoining, for the storage of grain and flour. 25 employees are constantly engaged in the mill, and 3 engines and a battery of 3 boilers, aggregating 350-horse power, supply the requisite force for driving the machinery. The brands of flour manufactured by the Pittsburgh City Mills, are prime favorites in this market, widely recognized for their fineness and absolute freedom from all foreign substances or adulteration. The firm have made it an inflexible rule to buy nothing but No. 1 wheat, which they are ready to purchase for cash, at highest market price, and at all times. Samples may be sent them by mail or otherwise, bags and hauling being supplied the seller free of charge, this policy also including oats and shelled corn. The bulk of the product is absorbed by the cities and in this immediate locality, the business averaging about \$300,000 per annum and steadily increasing. Enterprise and probity are characteristics for which this house is noted, and under all circumstances it is recognized that they may be implicitly relied upon. Adding to the material resources of the community and intimately connected with its development and prosperity for over a quarter of a century, the house of Marshall, Kennedys & Co. have achieved a position as richly deserved as it is gladly accorded.

ALHAMBRA HOUSE,—Robert Woods, Prop'r., 233 Federal St., Allegheny.

The above well-known house is situated on the west side of Federal street, a short distance above the parks, and is owned and managed by Robert Woods, Esq., who was formerly engaged in business at 116 Penn street, Pittsburgh, but removed to his present location in 1866. Mr. Woods was born in Ireland, in 1833, and came to Pittsburgh when quite young, but becoming dissatisfied with the place removed to Allegheny, where he has since remained. His business is carried on in a neat and substantial two-story brick building with a lot 20x100 feet and is a favorite place of resort for the natives of the Emerald Isle and all classes of people who are always made welcome by the obliging proprietor. His home is fitted up in a neat and tasty manner, and the best of wines and liquors are kept constantly on hand. Commencing in a small way he has built up a good trade and is doing a nice business of \$2,000 per year. Parties desiring a quiet comfortable stopping place will find at the "Alhambra" pleasant and agreeable quarters.

H. LLOYD, SON & CO.—Kensington Iron Works, Second Av.

It is but just, as well as proper, to assert that no house identified with the great staple trade of Pittsburgh, has done more to advance the general interests of the community, as well as develop latent resources in the manufacture of iron than the widely known firm of H. Lloyd, Son & Co. It is now more than half a century since the business was established by John O. McNickle in 1828, who continued his operations till 1845, when the plant was destroyed by the "great fire." One year subsequently, however, it was reconstructed by various parties, who were eventually succeeded, in 1855, by the firm of Miller, Lloyd & Black, then Lloyd & Black, which became one of the most celebrated and successful iron working concerns in America. In 1872 the demise of Mr. Black changed the style of the house to that which at present obtains, and during the current year the death of Mr. Henry Lloyd, Sr., left the business in the hands of the present proprietors. The decease of the senior partner and head of this house created a marked sensation throughout the entire iron confraternity, as well as the community at large. For a long time after this unfortunate event the daily press teemed with items in reference to his history, and resolutions of respect and condolence from the various commercial and benevolent organizations with which he was connected, and to whose prosperity his influence had conducted to so great a degree. Henry Lloyd, Sr., was a colossus both in heart and intellect, and the reader will pardon this deviation from the direct objects of this work, in consideration of the vast interests which seemed to center in the talent and activity of Mr. Lloyd. The plant of the Kensington Iron Works is situated on Second ave., and is compact, thoroughly equipped with the best machinery and appliances, and is considered one of the old and standard mills of this great Iron City. Numerous structures are requisite for the proper division of the various departments, and consist in part of warehouses, roll house, ore building, clay house, the mill proper, offices, &c., covering in all an area of about 5 acres, and engaging the labor of 150 operatives, running single turn, to whom are paid not less than from \$1800 to \$2000 weekly. The machinery and apparatus consist mainly of sixteen puddling furnaces, six heating furnaces and four trains of rolls, the total capacity being about 11,000 tons annually, and their products are Light T Rails, Flat Rails, Special Irons for Agricultural Implements, Merchant Bar, Sheet and Boiler Plate of the best Common Refined Charcoal, and Juniata Bloom Iron, for the perfection of which this house has achieved an unrivaled reputation. The remaining partners of the firm at present are Henry Lloyd, Jr., and Henry Bulken. The former was born in Hollidaysburg, Pa., 1855, and accompanied his father to this city as a child, having resided here since that time. The latter is a native of Norway, where he was born in 1841, removing with his parents to this country in 1848, and for twenty-seven years has made Pittsburgh his home. These gentlemen, who may be said to have been brought up to the business, now conduct the same with no lack of ability, the annual transactions under ordinary circumstances reaching about \$400,000, and extending to every section of the Union, especially to the West, North and Southwest. With facilities of the highest order, ample capital, and a splendid and untarnished career the house of Henry Lloyd, Son & Co. has acquired a place in the consideration of this community that few firms ever attain to and perhaps fewer still deserve. In the advantages offered to the trade, both in price and quality of goods, the firm compete successfully with any, and as a desirable one with which to establish agreeable, profitable and permanent relations has no superior.

GEORGE B. MITCHELL & CO.—Iron Commission Merchants, Warehouse and Office, 133 1st Av. & 104 2nd Av.

The great Iron City of Pittsburgh affords an excellent field for the transaction of an immense business in this line of trade. With facilities unequalled, and with business experience possessed by few, the house of George B. Mitchell & Co. commenced business as general commission merchants for the sale of every description of Iron, Pipes and Tubes under the most auspicious and favorable circumstances February 1, 1879. Their office and warehouse are located at 133 1st ave. The warehouse being 20x160, three floors and basement, where they carry an average stock amounting to about \$15,000. From present indications, judging from what they have already done, and their assured prospects for the future, their annual transactions will reach from \$300,000 to \$500,000. They do an exclusively commission business, and their trade is throughout the East, West and North, with extensive business connections in Canada. The specialties of this house are Steam, Gas and Water Pipe Fittings, Boiler Tubes, Boiler plates and Sheet Iron, and every description of goods pertaining to the Iron trade in these departments. Both members of the firm have been identified with the iron interests of Pittsburgh for many years, and enjoy an extended business acquaintance in all parts of the Union. Mr. Geo. B. Mitchell, who is yet a young man, is a native of Washington Co., Pa., and came to this city in 1865. He was formerly connected with the well known and extensive houses of Schenberger & Co., Evans, Dalzell & Co., and the Crescent Tube Works Co. (limited). Mr. J. E. B. Dalzell, his partner, was formerly associated with Lewis, Bailey, Dalzell & Co., Evans, Dalzell & Co., and more recently with the Crescent Tube Works Co. (limited). He is a native and life-long resident of Pittsburgh, and for many years identified with some of her leading business houses and important manufactories.

HENRY SCHMIDT, —Pharmaceutist, 4016 Butler St.

The establishment of this popular Pharmaceutist and Druggist, is located at 4016 Butler street, where he keeps in his large and elegant rooms as complete a stock of drugs, chemicals, fine instruments, fancy goods, etc., as is to be found in any establishment in the city, in the display of which his fine taste is apparent. The business was started at present location by Mr. S. in 1870, since when by his courtesy and popular manners he has been successful in establishing a prosperous business and securing the generous patronage of an appreciative public. Mr. Schmidt was born in Pittsburgh in 1848, parents dying when he was quite young, he was left to make his own way in life. He entered a leading drug store in this city where he remained a considerable time, acquiring a thorough knowledge of the prescription and drug business—was afterwards employed in different drug establishments as prescription clerk, until having by close economy accumulated sufficient means engaged in his present business, where he is now prospering and in the enjoyment of the respect and confidence of the medical fraternity and the community at large. Mr. Schmidt was one of the originators of the Pittsburgh College of Pharmacy and is one of the directors of the praiseworthy institution, and is giving his earnest efforts to successfully establish it has shown his public spirit in an eminent degree. He is a gentleman of great intelligence and has had the advantage of extended travel throughout many parts of Europe and America, acquiring much valuable information in the various departments of life.

J. B. NOBBS, —Stoves and House Furnishing Goods, No. 940 Penn Av.

Mr. Nobbs commenced business in 1863 at his present location, building up a good trade. In 1872, owing to complications arising from no fault of his own, he was compelled to suspend, but, determined to succeed, he started again in 1874 and has not only paid up all indebtedness contracted by other parties in his name, but has established a flourishing business. His salesroom is 25x50, with a shop adjoining of the same dimensions, built by Mr. Nobbs. He carries a full stock of Cooking, Heating and Parlor Stoves, Tin, Copper and Sheet-Iron Ware, Hardware and House Furnishing Goods of every description, and does a general jobbing business in Gas-Fitting, Plumbing and Repairing. Mr. Nobbs was born in Great Britain, but came to this city when a child. He learned the trade of tin worker with H. J. Demler, and has since been connected with various establishments. He served for a period as foreman with Mr. Jno. B. Sheriff at his steamboat works. He afterwards started a shop corner of Ferry and Liberty streets, but sold out and accepted the position of superintendent of the tin and sheet iron works on the Pa. R. R. for ten years. After leaving the R. R. shops he engaged in business at his present location. He has been a member of the School Board from his ward and enjoys the confidence and respect of the community.

W. H. HOLMES,—*Rye Whiskies, Wines, Brandies and Champagnes,*
No. 117 Water St. and 154 First Av.

It is a well recognized fact over the entire United States that the best whiskey in the country, and perhaps in the world, is manufactured in the neighborhood of Pittsburgh, and in the delightful valley of the Monongahela. Among the most prominent distillers, and having a reputation unequalled for the choice character of its whiskies, the house of W. H. Holmes is justly regarded as occupying a high position in the trade, its products having become celebrated locally among the most undoubtedly critical consumers of Rye Whiskey extant. The warehouse of Mr. Holmes is located as above, having two frontages, on Water street, or the Levee, and on 1st avenue. The building is a spacious one, 37x165 feet, having 4 floors and cellar, with elevators and other conveniences, the counting rooms being upon the first floor. The distillery is in Green Co., Pa., near the Monongahela River; it is an extensive and carefully managed establishment, being No. 9 in the 22nd district. Besides the manufacture and sale of pure copper distilled Rye Whiskies, the house also imports Wines, Brandies, Gins and Champagnes, and deals in the better class of domestic goods. The stock of Whiskey always on hand will range from 1500 to 2500 barrels, and, though no traveling salesmen are employed, the trade ranges over the whole United States, and amounts to over \$150,000 per annum. Mr. W. H. Holmes is a native of Pennsylvania, having been born in Fayette Co., in 1827. Engaged as a practical distiller for many years at Brownsville, Pa., he removed to Pittsburgh in 1872, since which period a uniform and increasing success has attended the pursuit of his business. Mr. John S. Holmes, a son of the proprietor, has charge of the books and clerical department, which he conducts with systematic order and ability. Aside from the attractions offered by the character of the goods in which it deals, this house is a favorite one on account of the pleasant relations which always exist between it and those with whom it is connected. The business policy upon which it is conducted is liberal, reliable and enterprising, a due regard for the benefit of others entailing it to particular esteem and commendation. A statement made in 1871 by J. W. Scott, Deputy Collector, and J. W. Hawkins, United States Storekeeper, reads as follows: "We, the undersigned officers of internal revenue, do hereby certify that the Whiskey manufactured by W. H. Holmes at distillery number three, 24th district, Pennsylvania, is made as follows: Rye, 94 bushels, barley malt, 6 bushels, and double copper distilled by fire."

M. J. HINES,—*Dry Goods, Millinery, Notions, Trimmings, etc., 4114 Butler St.*

Among a number of very handsome stores and extensive establishments in the East End, or Lawrenceville district, the dry goods and millinery store of Mr. M. J. Hines is deserving of more than passing notice, while the history of Mr. Hines is a characteristic one, and is an example of many of the successful and enterprising business men. The store-room occupied by Mr. H. is a large and handsome one, fitted up very neatly, and is stocked with as complete, varied and choice a stock of goods in his line to be found in this part of the city, and the stock is kept up with frequent invoices of all the latest novelties and most approved patterns, etc. Seven hands are kept fully occupied in the different departments. A specialty is the Millinery department, to which great attention and care is given, and which is under the charge of a thoroughly competent and fashionable milliner, and in this branch of his business Mr. H. enjoys a reputation for superior and excellent work. Mr. H. fully appreciates the importance and advantage of low prices and small profits. Mr. Hines was born in Harrison Co., O., in 1848. Ten years ago he removed to this city, where he secured employment, and worked at various occupations until, by economy having accumulated a small sum, he engaged in business on a limited scale in the borough of Sharpsburg, where he built up an extensive trade, and after remaining 5 years in that place, with commendable enterprise, resolved to seek a larger field of operations, and removed to his present location, where he now has one of the leading establishments in this part of the city.

Z. CRUIKSHANK,—*Groceries, 214 Arch St., Allegheny,*

Every family and every household has repeated and impulsive calls for articles in this line, and the citizens of Allegheny find one of the most enterprising establishments of this character at No. 214 Arch street. Mr. Z. Cruikshank started in business as the successor of O. Cruikshank, who commenced in 1844. He carries a full line of choice Family Groceries and Provisions, Flour, Butter, Eggs, Notions, etc., and does a large and successful trade, employing three assistants. His building is a three-story brick structure, 18x36 feet, and his annual sales will aggregate \$30,000, doing both a wholesale and retail trade and dealing largely in Vegetables and Fruits in their season. Mr. Cruikshank is an enterprising citizen, and fully merits the liberal patronage he receives.

DR. D. COWLEY,—*Homœopathic Physician and Surgeon, Penn Av., East End.*
Third house East of Deniston Avenue.

The more modern, simple and rational homœopathic system is fast superseding the old system. Many of the most influential, prominent and successful physicians of Pittsburgh (whatever their former proclivities) now practice exclusively this mode of treatment. Prominent among the original homœopaths of Pittsburgh is Dr. D. Cowley. He graduated at the Homœopathic College of Pennsylvania, at Philadelphia, in 1853, and began the practice of medicine in that city in the same year. After a residence there of ten years he removed to this city, where he practiced in the city proper about seven years, but for the past ten years he has devoted his attention principally to his profession at the East End. He is the oldest graduate of any of the homœopathic colleges now residing in Pittsburgh. Dr. Cowley was born in the County Down, Ireland, in 1830, but came to this country, with his parents, in 1832.

J. J. FORSTER,—*Groceries, Dry Goods, Wall Paper, &c., Penn & Shady Av's, E. E.*

This great variety establishment was started by John J. Forster & Bro. in 1870, with a capital of \$4,000. In 1872 the junior member withdrew, taking out with him about \$2,000. Since that time the business has been in the hands of J. J. Forster alone. The stock is estimated at \$2,500, and the business transacted yearly is at least \$6,000 to \$8,000. The building is 36x80 feet, having two store rooms. Two hands are employed in the thriving establishment, and the stock embraces a great variety of Dry Goods, Wall Paper, Notions, etc., and lowest prices prevail. No wonder its custom is great and flourishing. Mr. Forster was born in England, in 1834, and has been here since 1842. He began selling goods in East Liberty in 1852, and has continued in trade ever since. He is an enterprising merchant and worthy gentleman.

FRANK DIETRICH,—*Butcher and dealer in all kinds of Meats, 1139 Penn Av.*

Mr. Frank Dietrich is located at No. 1139 Penn avenue, where he keeps the finest meat establishment in that part of the city. He began the business at his present location in 1861 and has continued in the same place ever since, during the eighteen years of his varied business career having accumulated some means and many friends. He keeps the best stock of meats and best quality. He was born in Alsace, France, in 1836 and came to the United States in 1858. After farming and teaming he came to Pittsburgh and worked two years as apprentice at the butchering business, and then commenced for himself. He is a member of City Councils and has a high reputation in the community.

KIER BROS.—*Manufacturers of Fire Brick, Office, 369 Liberty St.*

Mr. S. M. Kier, father of the three brothers constituting the above-named firm, was the pioneer of Fire-Brick manufacturers in the United States, having established the first works of this kind ever constructed in this country. As early as 1845, in company with another gentleman, he constructed and operated what was known as the Bolivar Works, and thus laid the foundation of this now important branch of industry in this section. Mr. Kier was in many respects one of the most remarkable men of this century. He accomplished more towards developing the immense resources of Western Pennsylvania than any other single individual since its settlement. Mr. S. M. Kier and his father were early interested in the development of the salt wells on the Allegheny River, about twenty miles above Pittsburgh, the discovery of which produced a revolution in the salt trade and opened up a new source of wealth by supplying the market with an article of universal consumption which had hitherto been brought from the sea-board at an immense expense. These salt wells had for some time yielded a small amount of petroleum, which, at that day, was allowed to go to waste, as no one had discovered any use for it, when Mr. Kier became satisfied of its medicinal properties and healing qualities. He accordingly experimented with it for some time and then opened an office in Pittsburgh and commenced bottling and introducing it throughout the country under the name of "Kier's Petroleum or Rock Oil." Many of our readers will remember the magnificently decorated wagons which nearly thirty years ago were to be seen in every city and town throughout the Union, with pictures of the good Samaritan administering aid and comfort to the sufferer. The oil thus sold was highly recommended by physicians and others and met with an immense sale, which continued for many years. The supply, however, after a while so much exceeded the demand that Mr. Kier conceived the idea of utilizing petroleum for illuminating purposes, but owing to the odor and smoke arising from it, this disposition was deemed impracticable even by many scientific men. The first attempts of Mr. Kier at distillation were not crowned with that success which he had hoped for, but he persevered with his investigations, and making some changes in the old style of camphene lamps, he made the important discovery that his distillate would burn under certain circumstances. From this rude beginning he went on making improvements in the quality of his distilled oil and the adaptability of his lamp, until at last, by the introduction of the "Vina" burner and the treatment of his distillate with acids, he had brought his experiments to a close and secured to the world one of the greatest and most important discoveries of modern times. Up to this time he had enjoyed a monopoly in the production of petroleum, but the magnificent results of his inventions led to the discovery of other wells in various portions of the State and Continent, and from that day to this petroleum has been one of the most important products of Western Pennsylvania. The original "still" is retained in the family as a priceless relic. A limited supply of this prepared oil is kept on hand to supply the wants of customers from various sections of the country. This is a brief record of what has been accomplished by one man in developing the resources of our city and State in three important branches of industry. Mr. S. M. Kier was succeeded in the Fire-Brick business by his three sons, T. C. Kier, H. E. Kier and W. L. Kier, who are worthy representatives of their enterprising and respected father. These gentlemen manufacture the famous brand of "Salina" Fire-Brick and Tiles and Fire-Clay of a superior quality. Their productions are all manufactured with the utmost care, upon scientific principles, and with a thorough knowledge of their combined chemical qualities. In their office are numerous cabinets filled with specimens of the various clays used in their crude and prepared state. This firm received a medal and diploma awarded by the Centennial Commission, International Exhibition at Philadelphia, in 1876, for "good reputation and standard value of Fire-Brick, Arches and Keys", and have testimonials from many of the leading manufacturers of Pittsburgh endorsing the uniform excellence and superiority of their products. Their yards and buildings cover an area of more than four acres, with two powerful engines of fifty-horse power, and all the necessary machinery and appliances for carrying on their extensive business. They mine their clay and coal on their own lands, being the only firm owning their own coal and clay lands. The ground surface of their lands is 124 acres, depth of coal bed seven feet, and of the clay veins from six to fourteen feet. Twenty-five hands are employed at their yards and they carry an average stock of from fifteen to twenty thousand brick and tile. The reputation of their Fire-Brick and Clay and the demand for the same extends all over the country wherever there are furnaces or manufactories requiring a superior article of this description. The three brothers are all natives of Pittsburgh and have always been identified with the business interests of the city. Mr. H. E. Kier is engaged in other pursuits, but the other two brothers have sole charge and supervision of the business and devote their personal attention to its interests and development.

JAMES BEST,—*Choice Family Groceries, Selected Teas, etc., 271 Federal St., Allegh'y.*

Situated on the west side of Federal street, a short distance above the Parks, is the establishment of Jas. Best, Esq., who was born in the North of Ireland in 1809 and came to Allegheny in 1850. He occupies a three-story brick structure, 23x55 feet in size, which is one of the neatest and most substantial buildings in the vicinity. Starting in business with a capital of only \$2,000, he has gradually increased his trade. Stock on hand amounts to \$3,000 and his sales amount to about \$12,000 per annum. His stock of goods will be found to be of the best and purest quality. Parties making purchases at this establishment can rely upon getting the very best of goods at prices as low as any house in the city. Satisfaction guaranteed or the money refunded.

WM. H. SMITH,—*Flour Commission, 382 Penn Av.*

This house, although a comparatively recent acquisition to the Commission Flour business of the city, having been started in 1877, is ranked among the well-known and most reliable concerns in this line of business. Flour is the principal article handled. Mr. Smith having close business connections with the manufacturers of the best brands in the West and he enjoys a large patronage from city dealers, at the same time disposing of considerable quantities within one hundred miles of the city. Grain and Feed form no inconsiderable portion of the business of the house, while many other articles are handled, such as usually pertain to the general commission business. The store occupied has a frontage of 20 feet on Penn avenue and extends back 120 feet, being one of the most commodious business houses on that street. As is generally the case with good houses in this line, this concern makes advances on consignments, and its business transactions will always be found prompt and reliable. Mr. Smith has been a resident of Pittsburgh for 28 years, enjoying the respect and confidence of the business community.

J. & A. SPERBER,—*Artists & Photographers, 90 & 92 Federal St., Allegheny.*

In no trade or profession is there required a nicer perception of the proprieties, a finer artistic training or a more accurate knowledge of the laws of perspective in light and shade. To be a good photographer requires more than an insight into the purely mechanical part of the business and in calling attention to the art gallery of Messrs. J. & A. Sperber we can conscientiously commend these gentlemen as artists of ability and masters of their profession. Both members of the firm learned the trade with G. A. Uhle & Son, whom they succeeded in May 1876. Their rooms are admirably lighted and arranged, and their operating, printing and finishing or crayon rooms are under the charge of competent and experienced workmen. In fine work they will compare favorably with any similar establishment East or West. The members of the firm are John Sperber, who was born in Pittsburgh, Oct. 25, 1854, and Mr. August Sperber, born in the same place Oct. 30, 1852. Two assistants are employed who thoroughly understand every detail of the business.

THE MUTUAL GLASS CO.—S. & J. Gallinger, Office, 145 First Av.*New York Office and Salesroom, 36 Barclay St.*

For more than eleven years the house of S. & J. Gallinger have been intimately identified with the glass trade of this city, conducting in no small degree to its more ample development and achieving a position worthy of more than brief consideration in this work. Established in 1863, under the present management, the firm became associated with several large glass manufacturing concerns whose products they engrossed and placed upon the market with success, so much indeed as to warrant the construction of a factory of their own in New York City, where they had always done an extensive trade, having their branch office and salesroom at No. 36 Barclay street. The manufactory in the East was put in operation about one year ago for the special object of making bronze lamps, on which they had made several improvements, securing letters-patent on a socket which is by far the best and most durable in use. Ten thousand dozens of these lamps have been already manufactured and sold, which, as the product of the first year, is pretty conclusive evidence of superior merit and utility. The class of goods in which the Messrs. Gallinger deal embraces all varieties of Table and Fancy Glass Ware, Lamps, Chimneys, Bronze Lamps, Chandeliers, Bottles, Flasks, Fruit-jars, &c. Lettering, Engraving and Etching done to order on all kinds of glassware. The trade of the house is not confined to the United States entirely, large invoices of goods being shipped to foreign countries, with a rapidly increasing business in this direction. This is one of the most energetic and reliable houses in the trade, being in all respects, a desirable one with which to establish permanent relations.

W. J. McCRICKART,—Wholesale Wines and Liquors, No. 337 Liberty St.

This house was founded in 1854 by Mr. S. M. McCrickart, father of the proprietor, who succeeded to the business in May, 1879. For a quarter of a century the establishment has held a prominent position among the wholesale houses of Pittsburgh and is justly entitled to rank among the representative mercantile establishments which have given the Smoky City a national reputation. Mr. McCrickart occupies the entire four-story brick building, 21x69 feet, at No. 337 Liberty street, and the business has been conducted in this block since 1848. He carries a full and complete line of Foreign Wines, Brandies, Gins, Rums, &c., of his own importation, and all the leading brands of Pure Rye and Bourbon Whiskies. Mr. McCrickart gives his personal attention to the business, employing one book-keeper and two salesmen. His annual sales for the past ten years have averaged about thirty-thousand dollars, extending throughout the eastern and western portions of Pennsylvania, Eastern Ohio and West Virginia. Mr. McCrickart is a native of Pittsburgh, born Sept 22, 1850. He is a wide-awake, energetic and reliable young man, under whose management the well-earned reputation of this old-established house is perfectly safe.

JOHN McINTYRE,—Miner & Shipper of Gas Coal. Office, 513 Liberty St.

The superiority of the Gas Coal found in what is known as the great Pittsburgh coal vein is now universally acknowledged by gas managers, manufacturers and consumers generally throughout the country. Among the prominent mines and shippers of this important factor of Pittsburgh's wealth and commercial importance is Mr. John McIntyre, whose office is located at No. 513 Liberty street, and his mines at Wilkensburg, Allegheny county, on the line of the Pennsylvania Railroad, and known as the Hampton mines. Mr. McIntyre has been engaged in his present line of business for the past five years and has built up a large and flourishing business which will compare favorably with that of any house in Western Pennsylvania of a similar nature. He employs at his extensive mines one hundred and seventy-five men at an expense of about \$70,000 per annum. The annual yield of the Hampton mines is about 65,000 tons, valued at not less than \$1000,000. One steam engine is used at these works and his facilities in every way are unsurpassed. His trade is largely local and throughout the West, and the coal furnished by him gives universal satisfaction wherever it is used. Mr. McIntyre is a native of Pennsylvania and has for many years been identified with the coal and mining interests of Pittsburgh. He is an active and energetic business man, thoroughly conversant with the details and requirements of the business in which he is engaged.

J. A. McKELVEY,—Carriage and Harness Bazaar, No. 4 Diamond St.

Prominent among the houses engaged in the manufacture of different varieties of vehicles, we may mention that of Mr. J. A. McKelvey, whose place is known as the "Pittsburgh Carriage and Harness Bazaar." This house was established about twenty-five years ago by Mr. John S. Shafer. In 1870 the present proprietor assumed the management. His establishment occupies the entire five-story brick structure, 60x110 feet, turning out annually about one hundred and fifty vehicles of various patterns. He keeps constantly on hand Carriages, Buggies, Phaetons, Road Wagons, &c., as well as a general line of harness adapted to all uses. Mr. McKelvey is a native of Pennsylvania and has long been a resident of this city.

MARTIN KESSLER,—Baker and Confectioner, No. 5 Frankstown Av., E. E.

With limited means Mr. Kessler commenced business, as his capital was not above \$30. He now has a capital of \$8,000. He carries a stock of \$200 and does a business of about \$3,000 per annum. This speaks well for the quality of the Bread, Cakes, Pies and the thousand other good and sweet things sold by him. An active and obliging saleslady assists Mr. Kessler in waiting on his numerous customers, and these never leave his shop unsuited in the price or quality of articles. Mr. Kessler was born in Germany in 1835 and came to this city in 1855, where he commenced business in 1861. He is highly respected and does a good trade.

JOHN LUSK,—Tin, Copper & Sheet-Iron Ware, Stoves, etc., 3 Frankstown Av., E. E.

Mr. Lusk commenced business in 1861 with a small capital, which he has greatly improved. The present stock of Mr. Lusk is about \$3,000, and his trade annually aggregates \$5,000. The stove room and shop cover an area of 16x60 feet. He manufactures Tin, Copper and Sheet-Iron Ware, does Roofing, Spouting and general Job Work to order, besides dealing in Stoves, Grate-fronts, Hollow Ware, &c. He employs three good workmen and his business has steadily grown since its commencement. Mr. Lusk was born in this city in 1828, and is of course well known as an honest and straightforward business man.

GEO. W. HUGHES,—Cigar Manufacturer, 143 Beaver Av., Allegheny.

Mr. Hughes is a native of Pittsburgh and a practical Cigar Manufacturer of many years' experience. He commenced business for himself in 1864 at No. 143 Beaver avenue, where he occupies a two-story frame and brick building, 20x60, making several celebrated brands of choice cigars. He carries a stock of Fine Cigars, Tobacco and Smokers' Articles, valued at about \$1,000; annual business, \$6,000. He uses only the very best quality of leaf tobacco, and his trade is constantly increasing.

JNO. KEIL, Sr.—*Wholesale & Retail Dealer in Flour, Grain, &c., 4022 Butler St.*

The feed establishment of Mr. Keil is located at No. 4022 Butler street, where the business was begun by Mr. K. three years ago in connection with the large grocery and dry goods store adjoining, then owned by him and since then transferred to his son, Jno. Keil, Jr. The feed business having grown into large proportions and Mr. K. at his advancing age not wishing to be encumbered with so great a business as the two combined, transferred the grocery to his son. Mr. K. is one of the older settlers of Pittsburgh, having come to the city in 1832, and lived here ever since; he can tell many interesting and entertaining incidents in connection with the history of this city. He was born in Germany in 1815 and emigrated to the United States in 1830, remaining two years at Frederick, Md., coming over the mountains from there shortly after. He worked 34 years continuously in the old Sligo mill of Lyon, Sherb & Co., being one of the most honored and respected and competent iron workers in the establishment. He possessed the esteem and confidence of the community in an eminent degree, and was Burgess of the borough of Monongahela prior to its consolidation with the city. In 1863 he removed to Lawrenceville and embarked in the grocery and dry goods business, since then he has been very successful in a business point of view, having amassed considerable means, and has by his upright dealings and honorable course attained a high position as an honored and respected citizen. He has served the people of his ward as a school director and has been treasurer of the board of his ward. Mr. K. has raised a large family of children who are scattered in various parts of the country.

JNO. KEIL, Jr.—*Groceries, Provisions, Dry Goods and Notions, 4020 Butler St.*

This establishment is located at 4020 Butler street, being the oldest establishment perhaps in Lawrenceville, now the 15th and 16th wards of the city, having been started by Wm. Smith near 20 years ago, passing from him to Robinson & Parker, then to Lutley & Bros., and then in 1863 to Jno. Keil, Sr., coming into possession of the present genial and popular proprietor in 1878. It is of course a well known and popular stand, well stocked with first-class goods and is doing a large retail business. Mr. Keil was born in the 33rd ward of the city in 1838 and has made the city his home ever since. Served three years in the Union army in Col. Bowley's 102nd Pa. Vols., was wounded in the wilderness, so severely as to necessitate his discharge on account of disability, after his return from the army was engaged in various enterprises in the inevitable oil business, as well as others, prior to engaging in present business. Mr. Keil has served his county as assistant Deputy Recorder.

THEODORE HARTDUNG,—*Merchant Tailor, 1300 Carson St., South Side.*

Mr. Hartdung commenced business in this city some years ago on a very moderate capital, but with a thorough knowledge of his business and the close attention he has given it, has placed him in the ranks of Pittsburgh's successful business men. He now carries over \$3,000 to \$5,000 worth of stock and does an annual business of from \$9,000 to \$10,000, employing five workmen regularly and increasing this number in the busy seasons. Custom work is his specialty, and he guarantees good fits. Mr. Hartdung was born in Germany in 1846 and came to this country in 1864, commencing business in this city. He is an affable and courteous gentleman, energetic and prompt in business, and possessing social qualities of a high order.

McQUIGG & GROVE,—*Choice Groceries & Teas, 237 & 239 Federal St., Alleghy.*

At the large and well-known establishment of the above firm will at all times be found a choice selection of pure and unadulterated Groceries and Teas, which will be sold at prices to suit the times and as low as any house in the city. The firm have had long experience in the business and thoroughly understand the wants of the public. Their specialty in their line of business is the "Pride of Allegheny Flour," being one of the finest and best brands of flour in the country. Mr. McQuigg was born in Allegheny in 1852, and his partner, Mr. Grove, was born in York County, Pa., in 1859. Commencing business on the limited capital of \$2,500, they have considerably increased the same and are now doing a business of \$15,000 per annum, with a stock on hand at present of \$3,500. Their stock of goods will at all times be found up to the standard and second to no establishment in the city, both in regard to quality and prices. All parties making purchases of the above firm can rely on getting the worth of their money and receiving polite and courteous treatment at all times. In addition to their "Pride of Allegheny Flour," all other choice brands are kept constantly on hand.

JAS. L. ORR,—*Real Estate Agent & Broker, No. 61 Sandusky St., Allegheny.*

Mr. Orr commenced business as a Real Estate Agent and Broker in 1876, with a capital of \$10,000, which has since increased to \$25,000, the greater portion of which is invested in real estate. He transacts a business of about \$60,000 per annum in Collections of Rents, also negotiating Mortgages, Notes and Bonds, and deals in Real Estate. His offices are located at No. 61 Sandusky street, and No. 71 Federal street, Allegheny. He employs one book-keeper and office clerk and three collectors. His business is principally located in Pittsburgh and Allegheny and in buying and selling farms in the rural districts. Mr. Orr was born in Ireland July 5, 1849, but has for 29 years been a resident of Allegheny City.

R. W. MEANS,—*Druggist, N. W. Corner of Federal St. & North Av., Allegheny.*

Situated immediately opposite the parks and directly on the line of the Pleasant Valley Railway, cor. of Federal street and North avenue, is the establishment of R. W. Means, who keeps constantly on hand a complete assortment of pure Drugs and Medicines, Toilet Articles, &c. at fair and reasonable prices. Mr. Means first commenced business in Allegheny, at 128 Federal street, in 1840, and is at present doing a business of \$6,000 per year, with a stock on hand of upwards of \$4,000. His place of business is a large three-story brick structure, 20x60 feet in size, and commands a splendid view of the parks both east and west. Mr. Means is one of the most respected citizens of Allegheny and was born in Allegheny County in 1823. He is ably assisted in his business by his son, Mr. Wm. Means, a polite and agreeable gentleman. All can be accommodated with medicines, &c., at all hours of the night and day.

MRS. M. M. PINKERTON,—*Fine Millinery, 103 Federal St., Allegheny.*

Mrs. M. M. Pinkerton is located on the west side of Federal street, a short distance above the railroad depot, where she keeps a complete assortment of Fine Millinery, Trimmings, &c. Mrs. Pinkerton has had about twenty years' experience in the business and thoroughly understands the wants of her patrons. She was engaged in business at 108 Federal street in 1860—removed to 103 Federal street in 1868, thence to 31 Federal street in 1876, and in April 1, 1879, came back to her present location. Prices as low as the lowest. Ladies will find her goods attractive and stylish and her work in trimming the most tasteful.

FLANAGAN & KLING,—Horse Shoers, 1110 Penn Av.

The enterprising and popular firm, Messrs. Flanagan & Kling, is located at No. 1110 Penn avenue, where they have a very extensive shop, and where they are doing a very large business as Horse-Shoers, keeping four assistant shoers. They enjoy a high reputation as skilled and superior workmen. The firm was organized and business commenced at their present location in 1863, and from the first their upright, honorable course and superior skill brought them a large business. Mr. Flanagan was born in Ireland in 1838, and came to the United States in 1847. Being an orphan boy he was raised by Wm. Ash, who was a blacksmith by trade and worked at that business many years in this city. Mr. F. was raised in the shop of his adopted parent and has worked hard at his boyhood up. He acquired his skill and knowledge of the business during this period. He worked many years at journey-work in the same shop, until finally concluding to start a shop for himself, he associated with him Mr. Kling, a long-time companion in the same shop. Mr. Kling was born in Germany in 1842, and came to the United States in 1860, he having learned his trade as horse-shoer in the old country. He enlisted in the 5th U. S. Cavalry and served with credit during the war. At the close of his term of enlistment he came to this city and secured employment in the shop of Wm. Ash, where the acquaintance was made with his partner which ripened into a friendship that will be life-long. Since starting for themselves they have been successful in accumulating considerable means.

R. T. RODNEY,—Undertaker and Embalmer, 35 Ohio St., Allegheny.

Mr. Rodney was born in Allegheny County, Pa., in 1839 and came to Allegheny in 1875, and has been engaged in the business of Undertaker and Embalmer at the old stand 35 Ohio street during the past four years. His business amounts to \$1,800 per year. In the art of Embalming Mr. Rodney has but few equals and no superiors in the city. His business is carried on in a large three-story brick building, 15x80 feet in size, and is within a few doors of the City Hall, on the line of the Pittsburgh & Allegheny Railway. His stock of burial Caskets, Shrouds, &c., are of the finest and most elegant designs, and will at all times be found equal to the best. Mr. Rodney was one of the first undertakers in the city to break up the monopoly of the livery-stable keepers and bring the price of carriages to funerals down to the reasonable amount of \$3.00.

GEO. RITTER,—Baker and Confectioner, 241 Federal St.

The Bakery and Confectionery of Geo. Ritter is situated on the west side of Federal street, above the parks, and is one of the largest and most complete establishments of its class in the city. The building is a three-story brick structure, 24x60 feet. Mr. Ritter was born in Germany in 1850, came to this country and settled in Allegheny in 1861. He first engaged in business at No. 45 Ohio street, but owing to increase of business was compelled to remove to his present location in 1877. Commencing business on the very small capital of \$300, he has increased the same to \$14,000, and is doing a regular business of \$4,000 per annum, with a stock on hand of \$3,000. He has several first-class workmen constantly employed, making the finest description of confections. He also manufactures the best Bread, Pies and Cakes, and is prepared to supply the choicest Cakes for Weddings or Parties. Ice Cream of all flavors constantly on hand in its season.

J. F. MILLER,—Pattern & Model Maker, rear of 167 Penn St.

In a great manufacturing city like Pittsburgh, where almost every conceivable article constructed of metal is to be obtained, the necessity for skillful and experienced pattern and model makers must be apparent. Among those who have made this branch of industry a study and occupation is Mr. J. F. Miller. Mr. Miller for the past six years has devoted his attention to the manufacture of every description of models and patterns required by manufacturers or inventors. He has occupied his present location in the rear of 167 Penn street below Sixth, with entrance on Cecil's alley, for the past three years, where he has ample room and all the necessary machinery for carrying on his business in all its departments. He is supplied with steam power from the works of the Pittsburgh Safe and Lock Company, having three skilled assistants. He has resided in Pittsburgh for the past twelve years, where he has built up a flourishing and lucrative business, amounting to between \$3,000 and \$4,000 per annum, with trade gradually increasing each year.

**L. GLESENKAMP & CO.—Carriage Manufacturers, 75, 77 & 79 Liberty St.
Office and Repository, 92 Penn Av.**

The firm of Messrs. L. Glesenkamp & Co. is not to be omitted in making a summary of Pittsburgh's industries. Founded thirty years ago by C. West & Co. for more than a quarter of a century, this house has enjoyed a high degree of success, and the character of the work executed by this concern claims the highest commendation. In 1875 the firm changed to its present style by the succession of Mr. L. Glesenkamp, who for years previously had been a partner with his predecessors, and Thos. S. O'Neil, almost equally well known to the trade. Since that time a marked increase has taken place in the business, which now averages \$100,000 per annum, and employs 45 skilled workmen and artisans in the fine mechanical departments, requiring a weekly disbursement of about \$400. The premises occupied by the firm are undoubtedly the largest and most commodious of the kind west of the mountains and consist of three four-story buildings 75x240 feet, containing work shops, machinery, varnish and paint rooms, and stock in the repository worth not less than \$75,000. Here the buyer is afforded facilities unequalled both in price and from the quality of the work for the selection of almost any vehicle known to the trade, the dexter wagons being a specialty. With a trade that extends over the entire world, it is not too much to say that much of the celebrity attained by American vehicles in England and Europe is due to the admirable and elegant work of L. Glesenkamp & Co.

ADAM HECKMANN,—Wine & Liquor Saloon, 371 Beaver Av., Allegheny.

Mr. Adam Heckmann keeps at all times a choice selection of the very best wines, liquors, ale, lager beer and cigars. Mr. Heckmann was born in Kurhessen, Germany, in 1853, and came to this country and settled in Pittsburgh in 1867, where he was engaged in the employ of Peter Gallisath, at 69 Diamond alley, where he remained about four years. He shortly after engaged in business on his own account and in March 1873, becoming dissatisfied with Pittsburgh he removed to Allegheny and opened the establishment at 371 Beaver avenue. The building is a neat and attractive two-story frame 20x40 feet. He is now doing about \$3,500 per annum.

JNO. S. COSGROVE,—Undertaker and Embalmer, No. 27 Ohio St., Allegheny.

Mr. Cosgrove was formerly engaged in business under the firm name of Flannery & Cosgrove, which was dissolved Sept. 30, 1875, by the withdrawal of J. J. Flannery. The business is still continued at the old stand by Mr. Cosgrove, who is doing a business of \$2,000 per annum. The business is carried on in a large three-story brick structure 18x110. The stock of Burial Caskets, Shrouds, &c., will at all times be found complete, with prices moderate. He is a first-class artist in embalming, surpassed by none.

BEESON & McMORRIS, —Designers & Engravers on Wood, 70 Fifth Av.

Every description of fine wood engraving is executed in the highest style of art by the above named firm. The business was established in 1865 by Mr. Beeson, who continued it until 1876, when Mr. James McMorris was admitted and the firm name became as at present. Both members of the firm are artists of acknowledged merit and ability. They make a specialty of fine mechanical work, illustrations for catalogues, views of mills, manufactories and business houses, newspaper and magazine engravings of every description from the finer and more artistic engravings to the most ludicrous caricatures and silhouettes. Manufacturers of specialties can here procure accurate illustrations of their various products, implements or machinery at reasonable rates. In fact these gentlemen are prepared to furnish cuts of every description and elegant designs for business cards, stationery headings, newspaper headings, or displayed and illustrated advertisements. Their trade which amounts to not less than \$5,000 per annum extends throughout the two cities, Western and Middle Pennsylvania, Ohio, Virginia, Indiana, Michigan and many of the Southern and Western States. Mr. Jacob Beeson was born in Fayette county, Pennsylvania, in 1832. He came to this city in 1846 and has since resided here, where he has established the reputation of being the most expert and artistic designer and engraver in the smoky city. Mr. James McMorris was born in Philadelphia in 1849. He came to Pittsburgh in 1875, after having learned the business in the city of his birth, and has been very successful here in the line in which he is engaged.

H. K. PORTER & CO. —Light Locomotives, 5 Smithfield St.

The business now conducted by Mr. Porter, under the firm name and style above given, was founded in 1866 by Smith & Porter. In 1871 the firm became Porter, Bell & Co., which firm was dissolved May 2, 1878, by the death of Mr. A. W. Bell, whose interest was purchased by Mr. Porter, the surviving partner, in December of the same year. The exclusive specialty of this house is the manufacture of light locomotives for narrow gauge railroads, contractors' use, factories, furnaces, mills, mines, and all kinds of special service for which ordinary locomotives are not practical or economical. The capital invested in this business is from \$100,000 to \$150,000. The factory and works are located at 49th and 50th streets, on A. V. R. R. and cover one acre of ground, embracing six departments which are all connected. They have one eighty-horse power engine, a cupola of 1,500 tons capacity and a variety of the most approved machinery necessary for carrying on so extensive a business. They employ from 100 to 150 workmen, whose wages amount to about \$60,000 per annum. They use only the very best material and employ skilled workmen, many of whom have been educated in the employ of the house. Mr. H. N. Sprague, who has been connected with the establishment for the past ten years, is superintendent at the works, and W. E. Lincoln, a gentleman of experience and ability, has the management of affairs at the city office, Mr. Thos. W. Bell represents the firm as traveling agent. The trade of this house extends all over the United States. It is one of the largest manufactories of light locomotives in this country and will compare favorably with any in the world.

WM. McCRACKEN, —Dry Goods, &c., 3814 Butler St.

This is one of the most flourishing Dry Goods Houses in Lawrenceville district, not one in this part of the city offering greater inducements to trade in dry goods, trimmings, notions, etc. Mr. Wm. McCracken, the proprietor, was born in Ireland, in 1846, learned the trade of machinist in his native country, and came to the United States in 1870. He first secured employment in Patterson, N. J., then in New York and finally settling in this city. By economy and the assistance of his accomplished wife, who is an artistic dress maker, he secured capital to engage in business for himself. In 1876 he opened a store at No. 3511 Butler street with dress making department over which his wife presided, but the growing trade demanded new quarters; the dress making department now employs 12 girls. The store is deservedly popular and in both departments enjoy public favor and liberal patronage.

A. W. THOMPSON —Tin, Copper and Sheet-Iron Ware, Stoves and Hollow Ware, 221 Federal St., Allegheny City.

Mr. Thompson was born in Shenandoah Valley, Pa., near the famous battle-field of Gettysburg, in the year 1824 and came to Allegheny when quite young. He is engaged in the manufacture of Tin, Copper and Sheet-iron ware of every description, and all work from his establishment warranted to be first-class in every particular. The business is carried on in a neat two-story frame building, 20x100, and commands an excellent view of the parks. He has, notwithstanding the hard times, managed to favorably increase his trade. Mr. Thompson is one of the oldest and most respected citizens of Allegheny.

W. B. ANDERSON, —Oyster, Produce and Commission Store, 31 Ohio St., Allegheny.

The neat establishment of W. B. Anderson is located on West Ohio street, near City Hall. The building is a large three-story brick structure and presents a fine appearance. Mr. Anderson is quite a young man, having been born in Allegheny in 1861. Having been engaged in business but a short time, and starting with but a small capital, he has by industry and perseverance considerably increased the same and is doing a snug business of \$4,000 per annum. His stock of goods will at all times be found pure, fresh and free from all adulterations. Persons wishing to purchase anything in his line will do well to call and examine his stock. Game of all kinds in season and warranted fresh.

CRUIKSHANK BROS. —Wholesale & Retail Grocers, American Grocery, Cor. Taylor Av. and Monterey St., Allegheny.

The above firm commenced business but a short time since on a capital of \$2,000, and have favorably increased it. They are doing a business of about \$25,000 per annum, with a stock on hand of about \$2,000. The members are J. F. & George L. Cruikshank, who were born in Allegheny. The building is a three-story brick 20x90 feet in size, of fine appearance; the stock of goods on hand will be found to be of the best quality. Their specialty is pure No. 1 coffee and American pride flour. All persons desiring pure goods should favor this establishment with a call. Prices as low as any house in the city and goods delivered free of charge. Strictly cash.

M. MAY, —Steam Dyer and Scourer, 56 Sixth Av.

This establishment was founded in 1872 by Messrs Slack & May, in 1875 Mr. May became sole proprietor. In experience and practical ability he has no superior in this branch in this city. To the art of dying ladies' and gentlemen's apparel of every description he gives special attention, warranting colors pure and clear. He also cleans and refinishes in black crape, piano covers, damask and lace curtains, and all other fine goods. His work is done on short notice and in the most perfect manner, which cannot fail to satisfy the most critical.

PITTSBURGH PLANING MILLS,—B. Schmidt & Co., Propr's, *Penn St., bet. Thirty-first & Thirty-second Sts.*

This business embraces extensive Planing Mills, Box Factory, Lumber Yards, &c., with lumber of all kinds, flooring, siding, sash, doors, blinds, shutters, mouldings, all kinds of boxes manufactured and on sale. Located between 31st and 32nd streets on Penn avenue, these works cover an area of 150x336 feet of ground, provided with latest approved machinery and facilities. They have invested nearly \$60,000 in the business and do an annual business of upwards of \$30,000, though not now running at their full capacity. They employ 12 hands with a monthly pay-roll of \$400. The business was started in 1861 by Pearson & Co., and came into the hands of the present firm in 1864, who have greatly increased the facilities and business. Mr. Schmidt was born in Germany in 1826 and came to the United States in 1849; was employed with C. Yeager & Co. for six years, afterwards engaged in the dry goods trade on Market street from 1857 to 1863; he served in the City Council from 1869 to 1873. The Messrs. Lamkemeyer are natives of Germany and came to the United States in 1847 or 1848, worked at the furniture business for others and then for themselves. The firm is composed of excellent and practical men and enjoy a high reputation.

J. A. McCREADY, M. D.—Office and Residence, 1059 Penn Av.

Among the many skilled and competent gentlemen associated with the medical profession in this city and whose abilities have achieved success, we take pleasure in mentioning Dr. J. A. McCready, who was born near New Lisbon, Columbiana County, Ohio, in 1847 and passed the early portion of his life upon a farm. After a brief experience in the cattle business, after completing his literary education at Mt. Union College, Ohio, he read medicine with Dr. Hammond, a very prominent physician of Wellsville, Ohio, and with Dr. Robert McCready, of Seweckly, Pa., also a gentleman of rare ability, under whose careful tuition he served a thorough training and laid the foundation for his future success. Dr. J. A. McCready is a graduate of the Bellevue Medical College, of the "class of '75." He first commenced practice in Ohio, but came to this city in 1876, where his practice and popularity have been large and his success most flattering in his practice as well as in the high position he holds in the profession, and for his standing with the community.

MANCHESTER ALE BREWERY,—H. Dippel, Proprietor.

Market and Juniata Sts., Allegheny.

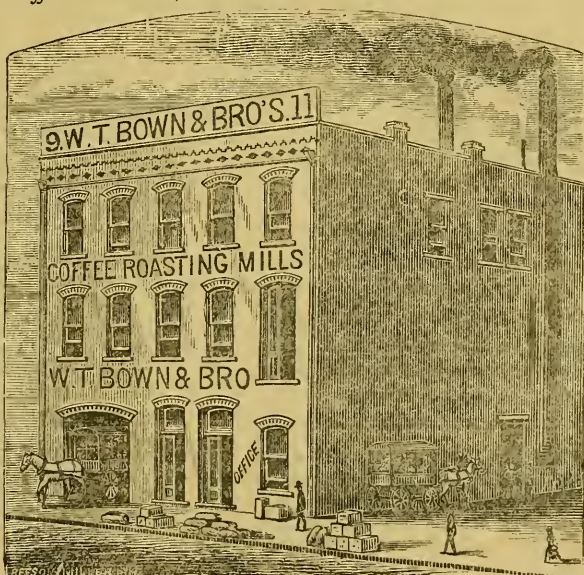
This celebrated Brewery was established several years ago by Mr. Henry Dippel, (now deceased.) The superiority of the ales manufactured by him soon brought the brewery into favorable notice and the amount of capital now invested in the business has since considerably increased and the popularity of the ale been maintained by the present energetic proprietor. The two buildings now occupied in the manufacture of this delicious beverage are situated on the corner of Market and Juniata streets, the main building being 40x30 feet, and the business is conducted in four separate departments. The machinery used is one twelve-horse power upright engine and one fifteen-horse power boiler. The number of hands at present employed is four. Mr. Dippel carries an ample stock and his annual trade, which is principally of a local character, amounts to about \$6,000. Wherever his ales have been introduced they give the most unqualified satisfaction and are highly recommended for their purity and general excellence. Mr. Dippel is a native of Allegheny and was born in 1842. He is a thorough practical brewer and understands all the details and requirements of the business.

Z. CRUIKSHANK,—Retail Grocer, Flour, Produce, &c., 214 Arch St., Allegheny.

The above establishment was opened in 1874 by Mr. Z. Cruikshank, a native of Allegheny, born in 1853. Commencing business on a small capital he has increased it to about \$2,000, has a stock on hand of \$2,000, and is doing the snug and comfortable business of \$18,000 per annum. His stock of goods will at all times be found pure, sweet and fresh and free from any adulterations whatever; his specialty is pure, choice teas of a superior quality, choice fruits and vegetables of all kinds kept in season. His establishment is a two-story brick house 15x 70 feet in size. Courteous attention given to all, and prices as low as any house in the city.

W. T. BOWN & BRO.—Coffee Roasters, No. 9 and 11 Seventh St.

This well known house supplies a long felt want on the part of our wholesale and retail grocers. Beginning operations with contracted facilities, the business has grown to large proportions, compelling them to remove from their old quarters to their present commodious premises, where, with the capacity for roasting 8,000 pounds of coffee daily, and the finest improved machinery, engines and other appliances, this house now takes rank as the principal establishment of the kind in the city. Their business is exclusively roasting and grinding for the trade. They use the most perfect machinery for browning, and the removal of all foreign substances in the process of roasting by a patented invention of their own, and mills for grinding, all operated by a 25-horse power engine. Nine hands and one team are employed, besides the firm, consisting of W. T. and S. E. Bown, the former being a native of England, but a resident of this country for a long period, the latter having been born in Allegheny.



SHERRIF & HAZELY,—Iron & Wood Working Machinery

and Manufacturers' Supplies, Market St. & Third Av.

The above named firm was established May 1st, 1879, both members having been previously engaged in the same line of business, with a thorough knowledge of all its requirements and a practical experience of many years. Mr. Sherriif has been identified with the business for the past ten years and until recently was a member of the well-known firm of J. B. Sherriif, Son & Co. Mr. Hazely is a practical machinist of long experience, who has for many years been connected with the house of M. B. Cochran & Co., in the same business. They occupy the spacious waterrooms 22x70 feet, at the corner of Market street and Third avenue, carrying a full line of every description of iron and wood working machinery, manufacturers' supplies, brass castings, gas pipe and fittings, steam gauges, belting, hose packing and the celebrated "Coll" steam syphon pumps. For this pump they are the sole agents for the United States. This firm makes a leading specialty of emery wheels, and is perhaps the only house in Pittsburgh that carries a full and complete stock, embracing every size required in the trade. They also deal in new and second-hand engines, boilers, and machinery of all kinds. Mr. Sherriif is a native of Pittsburgh and enjoys an extended business acquaintance throughout this section. Mr. Hazely was born in Connecticut and has resided in this city for the past eleven years. Both gentlemen are active, energetic business men and their commercial career commences under the most favorable circumstances.

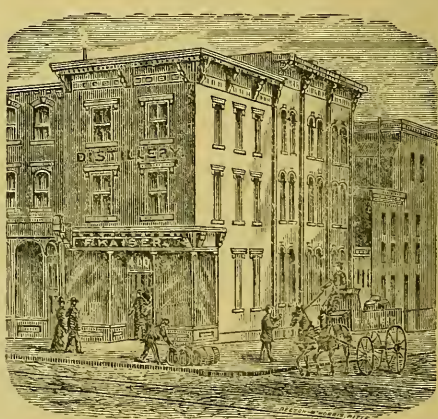
J. B. HAINES,—Wholesale Dry Goods, No. 94 Wood St.

Of those houses engaged in the Wholesale Dry Goods trade, it is entirely safe to assert that none in this city occupy a position more entitled to consideration than that of J. B. Haines, both with reference to the high commercial standard upon which its operations are conducted and the extent of the business transacted and influence upon the market. Since its establishment in 1852, by and under the style of Hampton, Wilson & Co., this house has always held a prominent place in the dry goods trade through all the changes incidental to a career covering a period of more than a quarter of a century. From its first title, after a continuance of some years, the house became Wilson, Carr & Co, which by the withdrawal of Mr. Wilson and the purchase of his interest by David McCandless, was changed to Carr McCandless & Co., and to David McCandless in 1872, by the demise of Mr. Carr. At this time Mr. J. B. Haines was head salesman of the concern and had then been connected with it for many years. Mr. Sheibler had charge of the books, clerical department and much of the finances, he also had been almost brought up in the house, and when, in 1872, David McCandless retired from the dry goods trade to assume the chairmanship of the Edgar Thompson Steel Co., Limited, and engage in the wider occupation of a manufacturer, the gentlemen just mentioned, as Haines & Sheibler, succeeded to the business and conducted it together till 1877, when, from ill-health, Mr. Sheibler was obliged to retire and the house came under the entire control of Mr. Haines. Through all these mutations, the characteristics first exhibited by its founders seem to have passed with its proprietary interests from hand to hand, gaining some added value, rather than losing efficacy at each successive transfer, making more prominent, if possible, the honorable, enlightened and enterprising policy for which the house was always conspicuous. The late David McCandless was a striking illustration in his own person of these attributes, and possessed not only marked talents as a business man, but that high sense of justice and rectitude that made him the ornament and exemplar of the best commercial class of society in Pittsburgh. With such an established reputation, it is no matter of surprise that the house has always been a favorite one, appropriating a very large share of the trade transacted in this city and affording buyers certain advantages, the results of a long connection with the most extensive manufacturers in the country, that cannot be easily duplicated by any similar concern in the West. The facilities, so far as regards the premises occupied, for the successful operation of the business, are all that could be desired, no house having a more ample, commodious or eligibly situated building. At No. 94 Wood street, in the very center of the mercantile traffic of the city and convenient to all prominent points, is located the handsome edifice of the house, five stories in height, thoroughly appointed throughout, having an L that secures an ample frontage on Diamond street, a finished basement, and numerous other conveniences. Here may be found at all times a very complete assortment of Staple and Fancy Dry Goods, Foreign and Domestic, embracing a wide range in the varied departments of textile fabrics and affording an opportunity for selection rarely attainable outside of the great markets of the country, with a perfectly comprehensive knowledge of the business and a nice discrimination as to the exact requirements of the trade. Mr. Haines has made his house a most desirable one with which to establish pleasant and profitable relations, no one understanding better how to secure for buyers, through a wide experience, the lowest prices and best terms obtainable. Cordially commending this house to the trade and the public, and directing attention to the manner in which it is conducted and the amplitude of its resources, it may be properly added that, as ranking among the first in the line of its cotemporaries, the establishment of Mr. J. B. Haines is of that class which commands the respect of the trade and the consideration of the community at large.

F. KAISER,—Wines and Liquors, No. 400 5th Av.

This house, which is one of the best known and oldest established wholesale liquor concerns in the city, was started by Mr. Kaiser in 1860, on a nominal capital, so that the present position Mr. Kaiser has attained is due purely to his own talents and perseverance. The building now occupied is a three-story brick warehouse, having a frontage of 60 feet on Fifth ave., and extending back 112 feet. At 404 and 408 Fifth ave. may be found wine vaults of very considerable capacity, which are used for storing wines, which are a very prominent feature in the trade of the house. A stock of \$60,000 is carried, embracing a full line of Wines and Liquors, both foreign and domestic, while the concern is particularly noted for the fine line of Rye Whiskies and California Wines which they carry in stock. The annual business amounts to \$100,000, and the trade of the house is principally in Western Pennsylvania, Eastern Ohio and West Virginia.

Mr. Kaiser is a native of Switzerland, and was born in 1822, but, having been identified with the business interests of the Iron City for so many years, is justly looked upon as one of the founders of the great jobbing trade the city now enjoys. He has the fullest confidence of his customers, while his standing



in the business community is of the highest character.

EBERHARDT & OBER,—*Lager Beer Brewers & Maltsters,* *Nos. 1 to 9, Troy Hill Road, Allegheny.*

Mr. Eberhardt, the original founder of this now popular and extensive establishment, was the third person who engaged in the manufacture of Lager Beer in Allegheny County and the first to introduce steam power into the business, which has at the present day assumed a magnitude which places it next in importance to that of the iron, steel and glass interests of the twin cities. As early as 1852 he commenced the brewing of Lager Beer on a comparatively small scale, and in 1870 the present firm assumed the management and control of the business, making extensive improvements and additions and producing a superior quality of beer which attained a wide spread and deservedly popular celebrity throughout the two cities and adjacent territory. The extensive buildings occupied by this firm comprise one two-story frame structure 40x44, a four-story brick malt house, 50x85, with a capacity of 20,000 bushels, a two-story brick brewery and boiler-house, 40x50, with a mammoth steam-kettle of a capacity of 80 barrels per day, two large boilers, 20 feet in length by 42 inches in diameter, and two engines of 20 and 15-horse power each respectively. Three large and splendidly arranged rock vaults for storage, which are admitted to be the finest, coolest and most perfectly constructed in the city, have a capacity of 5,000 barrels, and a new and spacious ice-house, 50x80 feet in size. As they live in the Iron City, they thought it best to construct their ice-house according to the general characteristics from which it is named, and it will therefore be substantially built of iron, stone and brick and will cost over \$20,000. All the girders and joists will be of iron, and it will be one of the finest and most complete structures for this purpose in the United States and will contain over two thousand tons of ice supplied from an ice pond belonging to the firm situated on Pine Creek, about six miles from the brewery where they also have another ice-house, 50x163 feet, containing seven thousand tons and furnished with a powerful steam elevator capable of lifting eight hundred tons per day. All the buildings connected with this model establishment are supplied with the best and most perfect machinery, apparatus and appliances known to modern science for the successful prosecution of their business. The average stock carried by this house amounts to not less than \$35,000, while their annual sales will aggregate fully \$100,000. The present production of the brewery is about \$14,000 barrels per annum, but with their increased facilities 40,000 barrels can be readily manufactured. Every department of the establishment is under the direct supervision of competent and skilled men, and fifteen hands are constantly employed. The quality of the Beer manufactured by this enterprising firm is in every respect first-class, only the best materials being used and careful attention paid to all the minutiae of the various stages of production. Mr. Wm. Eberhardt is a native of France, where he was born in 1843. He has resided in Allegheny since he was three years of age and has been prominently identified with the business interests and material prosperity of the city. In 1873 and 1874 he represented his ward in the Common Council, and in 1876 and 1877 in the select branch, to the universal satisfaction of his constituency. Mr. John P. Ober is a native of Allegheny and was born in 1848. He is a public-spirited citizen and energetic business man. Both members of the firm are highly respected and honored citizens in all the various walks of life, and the brewery under their able and judicious management, has become celebrated as one of the most perfect and complete establishments of its kind in the two cities.

CHARLES & McMURTRY,—*Patent Hot Pressed Nuts, &c., 16th St.*

The manufacture of Nuts is one of the important branches of the iron business in this city, entitled to notice in a work of this description from the magnitude and extent of the business, and from the fact, also, that the production of these articles by machinery originated in Pittsburgh, the first machine for this purpose having been built in this city in 1850 by Messrs. Carter & Rees. The firm of Charles & McMurry, which is to-day the leading establishment of its kind in the United States, if not in the world, was established in 1875, and since that time has made a specialty of the manufacture of Hot Pressed Nuts of all kinds and sizes. Their extensive establishment on Sixteenth St. is fitted up with the most complete improved machinery of every description for successfully carrying on this business in all its departments, including ample steam power and the largest Nut machines in existence, among which are improvements introduced by this firm and important inventions of which they are patentees and sole proprietors. They have facilities for manufacturing the largest Nuts ever made in the world by a large and powerful machine constructed on the most approved and scientific principles; and the superiority of all Nuts manufactured by this firm with their improved processes is acknowledged all over the country. The principal demand for their products is from railroad companies, bridge companies and contractors and manufacturers in all branches of industry requiring Nuts of superior quality and durability; and their trade extends all over the United States, from the Atlantic ocean to the Pacific coast. Mr. Charles, the senior member of the firm, was for many years associated with the firm of Carter & Rees, the first establishment that ever made a success of the manufacture of Hot Pressed Nuts, and is thoroughly acquainted with all the requirements of the business. Mr. McMurry has also had the benefit of long experience in this peculiar branch, and both members of the firm are active, energetic and reliable business men.

J. LEVY,—*Phila. Branch Clothing House, 91 & 93 Federal St., Allegheny.*

The above clothing and gents' furnishing establishment is located on the west side of Federal street, a short distance above the R. R. Depots, and directly on the line of the Pittsburgh & Allegheny and the Troy Hill Passenger Railways. Here will be found a choice assortment of men and boys' clothing of every variety, gents' furnishing goods, &c., sold as low as any house in Allegheny or Pittsburgh. Mr. Levy was born in Germany in 1838, and has resided in this country for many years. His stock is large and the quality and price of goods can at all times be relied upon. Clothing of all kinds made to order and warranted to fit, and all goods guaranteed as represented. Call and be convinced.

E. S. KENNEDY,—*Wines and Liquors, 1321 Carson St., S. S.*

Although this house was started as late as December 1877, it has met with a large measure of success; indeed, so successful has it been that Mr. Kennedy has already been compelled to increase the \$1,000 capital, with which he commenced, to \$5,000, to enable him to meet the demands of his rapidly increasing trade. Mr. Kennedy makes a specialty of fine foreign Brandies and Wines, which he imports directly in bond to Pittsburgh. His store and warehouse occupy a large four-story building, 20 feet front by 80 feet deep, and are well stocked with every thing in his line. C. S. Kennedy was born in Ireland, in 1848, his parents emigrated to America, however, before he was one year old, and he was brought to Pittsburgh. He learned the trade of a glass-blower, and worked steadily at that business until the great strike of 1877, when, having some capital, he launched into business for himself, and has succeeded beyond his expectations. Mr. Kennedy is well liked in his neighborhood, and at present represents his ward (the 28th) in the city councils, to the entire satisfaction of its citizens.

W. H. SKYLES & CO.—*Tallow Chandlers, Cor. 25th & Liberty Sts.*

Prominent among the business interests of the Iron City and occupying a position of high standing in the business world, attained through individual efforts and ability, is the firm of W. H. Skyles & Co., Tallow Chandlers; and in this branch of business theirs is the leading house in that line in this city. Their trade which is very large, is mainly foreign, the great bulk of their product being exported to foreign markets. A brother of Mr. Skyles, a thoroughly practical and experienced gentleman, is superintendent of the manufacturing department. The gentlemen composing this firm are men of character and ability, every way worthy of prominent mention and work devoted in the industrial history of the city of Pittsburgh.

HOME HOTEL,—Duquesne Way, Bet. Eighth & Ninth Sts.

This is an institution of which the city of Pittsburgh may well feel proud, and which is in every way deserving patronage and generous support. It was originally established about fourteen years ago by a number of benevolent and philanthropic individuals as a bethel for the relief of the needy and deserving poor. About seven years ago additions were made and a spacious and elegant four-story first-class hotel was erected fronting on Duquesne Way, which has been fitted up in the most thorough manner with all the modern improvements, including gas, water closets and bath rooms on each floor. The baths are free to guests and no pains is spared by those in charge to make this house what its name implies, a "Home Hotel" in every sense of the word. This is the only first-class temperance hotel in the city, and is largely patronized by clergymen. The rooms are well ventilated, handsomely furnished and strictly clean and comfortable. Ladies and gentlemen visiting the smoky city either on business or pleasure, will here find the best of accommodations, polite attendance and a table surpassed by that of no other house in the country. The Home Hotel is pleasantly and eligibly located on the banks of the Allegheny river, commanding a fine view of the Suspension and Hand street bridge and the beautiful city of Allegheny, and is away from the smoke, dust and busy din of traffic, noise and confusion of the large manufacturing establishments. Horse cars to all parts of Pittsburgh and Allegheny pass within a few steps of the door, and the main business houses are within three minutes walk. The Home Hotel is under control of a board of directors, and was established for the purpose of deriving a revenue from its receipts to aid in maintaining the Bethel, which is entirely separate from the hotel, and is a spacious establishment where hundreds can be supplied with food and lodgings at a merely nominal price. During the inclement weather of the winter months thousands of unfortunate persons avail themselves of its advantages. At present about sixty or seventy persons are entertained here. Rev. W. Long is superintendent of the Bethel; meals and lodgings are here furnished for five cents each. Of course at these prices the Bethel cannot be self-sustaining, and the receipts of the hotel after paying running expenses are devoted to the praiseworthy object of making up the deficiency; thus patrons of this house not only secure all the advantages of a strictly first-class hotel, but aid a worthy and deserving charity. The rates at the Home Hotel are as low as can be afforded and are as follows: per day \$1.25, meals 25 cents, lodging from 40 to 50 cents, board and lodging per week from \$5.00 to \$8.00, and rooms per week from \$2 to \$3. Mr. J. E. H. Kelley, the general manager, is a practical hotel man of many years experience, whose popularity and good social qualities have secured him a host of friends through all sections of the country. Mr. George H. York attends to the office department during the day and a competent assistant officiates as night clerk. These gentlemen are thoroughly conversant with their business and make every effort to please and entertain guests. In addition to the accommodations usually found at other hotels, ladies and gentlemen will here find social and moral enjoyments of the highest order. One hundred and fifty guests can be comfortably accommodated at the Home Hotel, which is deserving the liberal patronage of a discriminating and generous public.

A. S. MUNDORF,—Planing Mill, Lumber Yard & Box Factory, 23d & Mary Sts., S. S.

One of the prominent and leading industries on the South Side, Pittsburgh, is the Planing Mill, Lumber Yard and Box Factory of A. S. Mundorf, at the corner of Twenty-Third and Mary streets. The business was started in 1867 by Mr. G. A. Mundorf, who was succeeded a few years since by the present proprietor, who has largely increased the business. There is now in stock in the mill and yard about 200,000 feet of clear lumber and select stuff, which is below the average stock carried. The business runs from \$75,000 to \$80,000 a year and is steadily increasing. There are two buildings in use, the planing mill, a two-story frame structure, 80x120 feet, and the office buildings. The lumber yard covers an area of 264x380 feet. Twenty-five hands are constantly employed and the monthly pay-roll runs from \$1,000 to \$1,500. The capacity of the planing mill is from ten thousand to twenty thousand feet of flooring per day. Mr. Mundorf, owing to his unequalled facilities, is prepared to give estimates for the largest contracts and furnish material on short notice. In addition to the other business, this concern runs one of the most extensive box factories in the country, and deals extensively in pine and hemlock lath and shingles. They have another advantage over many other lumber dealers in having their lumber cut expressly for them in the vast lumber regions up the Allegheny River. The power to run this immense concern is supplied by an engine of sixty-horse power, two boilers 36 inches in diameter and 24 feet long, and the mill contains all the latest improved and most modern machinery in use in that line of business. Mr. Mundorf was born in Jefferson county, Pa., in 1854, from whence he came to this city, where he has remained since. He occupies a leading position among the business men of the community, and his social standing in the community is of the very best.

MONONGAHELA HOUSE,—J. M. Crossan, Prop., Smithfield & Water Sts.

This is the leading Hotel of Pittsburgh in all that pertains to a strictly first-class house. The original Monongahela House was built in 1841, but was destroyed and the disastrous conflagration which swept away the greater part of the business portion of the city in 1845. It was rebuilt upon a larger scale in 1846 and reoccupied as a hotel in the spring of 1847. The cost of the building and lot at that time was \$300,000. In 1867 the house was remodelled and re-furnished throughout, at a cost of \$150,000. The building is 160 feet square, five stories high, and contains 245 apartments, with spacious and elegant parlors, large dining room, 32x132, and another 20x70, furnished in the most tasteful and appropriate manner; suites of rooms and private parlors for the accommodation of guests, and passenger and baggage elevators. The house is supplied with a complete fire department, with hose available at any moment on every floor by means of Babcock Extinguishers, etc. An elegant billiard parlor and first-class bar are also connected with the house. Six hundred guests can be comfortably accommodated at one time. One hundred and ten attaches are constantly employed and each department is presided over by competent and experienced persons. The father of the present proprietor was the well known and highly respected proprietor of the Old Monongahela House, Col. John McDonald Crossan. The present proprietor was born in Pittsburgh sixty-four years ago, and has been proprietor of this hotel for forty consecutive years, which is probably the longest term which any hotel in the United States has been conducted under one management. This house can accommodate five hundred guests in good style and has given hospitality to six hundred at one time in good order. Furnished rooms are from \$2.50 to \$4.00 per day, according to location, special rates being made to troupes and combinations of any kind where clubbing rates are required. As one of the old landmarks of the city and an emblem of our city's past history and present prosperity, we are proud to refer you to the old Monongahela House.

J. S. REED & SON,—Planing Mill, Box Factory & Saw Mill, Cor. 24th St. & Penn Av.

The business now conducted by the above firm and to which it succeeded in 1878, was established in 1865 by Wm. Rigden, who conducted it until it came into the hands of Messrs. Reed & Son. The establishment is well equipped for the prosecution of the three departments of the work, being furnished with the latest and most approved machinery which is operated by a steam engine and boiler of requisite power. The senior partner is an expert mechanic, born in Bedford county, Pa., in 1823. He early acquired the trade of carpenter, at which he worked for some time, and after serving through the Mexican war with distinction, he again resumed his avocation, and enlarging his resources became a builder and contractor. Since his residence in Pittsburgh he has been engaged in the line of his present business in which he has been very successful, the proceeds of his toil, however, being mainly lost through the insolvency of others. The firm, however, with resolution and ability has retrieved its losses and is heartily commended as reliable, prompt and liberal in dealing, highly considered by those with whom it effects relations and prepared to offer unusual advantages to buyers at this or distant points.

PITTSBURGH PLANING MILLS,—*Douglass & Keally, Proprietors,* *Penn Avenue & 26th Street.*

Prominent among the industries and commercial pursuits of the Smoky City may be considered the general lumber interests. Among the houses engaged in the trade, the excellent firm of Douglass & Keally stands in the front rank among the largest dealers in Western Pennsylvania. The Pittsburgh Planing Mill, of which these gentlemen are proprietors, is most complete in respect to machinery, stock and all appliances. They manufacture every variety of flooring, weather-boarding, sash, doors, shutters, window-frames, mouldings, etc., employing a large force of men in the various departments. James Douglass, senior partner, was born in Ireland in 1832 and came to the United States in 1847. He worked at carpentering until 1865, when he entered his present business in partnership with Mr. McKee. Mr. A. D. Keally was born in this city in 1847; when thirteen years of age he commenced working for himself in a grocery store and remained in this business until he entered the service of Messrs. Douglass & McKee as book-keeper. Upon the retirement of Mr. McKee Mr. Keally entered the firm, although also engaged in the grocery and provision business at No. 1139 Penn avenue. He is at present a member of the School Board of his ward.

KEYSTONE TANNERY,—*J. C. Lappe, 188 to 196 Spring Garden Av., Alle'y.*

One of the largest and most extensive tanneries west of the Allegheny mountains is that of Mr. J. C. Lappe, known as the Keystone Tannery, and located on Spring Garden Avenue, Allegheny City from No. 188 to 196 inclusive. This business was founded in 1842 by Mr. Lappe. There are four large buildings connected with the establishment, the main structure being 100x200 feet in size with three adjoining buildings, with a capacity for storing 2,500 cords of bark. The tannery was originally located on Chestnut street, Allegheny, but was destroyed by fire in 1865 and rebuilt at the present location the following year on a much more extended scale with increased facilities and accommodations. The tannery is fitted up with all the requisite appliances and conveniences, and has ninety-five capacious vats and fifteen leeches. It has a capacity for turning out six hundred sides of leather per week. Forty-six hands are regularly employed at this establishment and the leather produced is of a superior quality and commands a ready sale in all portions of the United States. Oak tanned harness leather is the particular specialty for which the Keystone Tannery is celebrated, and this special production is not excelled by that manufactured in any similar establishment in this country. Mr. Lappe is to be congratulated upon the fact that he has from a comparatively small beginning built up by his own unaided efforts, energy and ability a business of such magnitude and proportions, and the city of Allegheny is particularly fortunate in having within its limits so successful and important an industry as the Keystone Tannery. Mr. Lappe is a native of Umstadt, Hesse Darmstadt, and was born in 1816. He came to this country in 1839 and located in Allegheny city the same year. Since that period he has been actively engaged in business pursuits and is highly respected.

A. L. CLARK,—*Carpenter & Builder, 225 Rebecca St., Allegheny.*

Mr. Clark is a native and life-long resident of Allegheny city. He was born in 1843 and since arriving at maturity has been identified with the business interests of the city. He is a thorough practical carpenter and builder and commenced business for himself at his present location in 1861 with moderate means but with a determination to succeed. He has now a capital of \$3,000 invested and has established a flourishing and lucrative business amounting to not less than \$3,000 per annum. The premises occupied by him are 75x100 feet, on which is erected a one-story frame building 24x50. He carries on a general carpentering and jobbing business, and contracts for the construction of buildings of every description. Six hands are employed and he carries a stock valued at about \$5,000. Mr. Clark is a highly esteemed citizen and responsible business man, and at the present time holds the position of tax collector of his district.

J. STEVENSON & CO.—*Pork Packers, etc., 327 and 329 Penn Av.*

The firm of J. Stevenson & Co. has been but recently established, although the senior member has been identified with this branch of business in Pittsburgh for the past twenty-two years, and during a greater portion of that time associated with the well-known house of E. H. Meyers & Co. Messrs. Stevenson & Co. are the immediate successors of F. Sellers & Co., which was the oldest-established pork house in the city, having been founded in 1842, and which for nearly forty years has maintained its position as the leading house in Pittsburgh in this branch of business. Messrs. Stevenson & Co. occupy the spacious double warehouses Nos. 327 and 329 Penn avenue, near Tenth street, carrying a stock of not less than \$60,000, consisting of Beef, Pork, Provisions, Sugar-cured Hams, etc., and transacting a business of not less than \$150,000 per annum. Their trade extends throughout Pennsylvania, Eastern Ohio and Maryland, and will compare favorably with that of any similar establishment in the city. Mr. Stevenson has resided in Pittsburgh for the past twenty-five years and is thoroughly conversant with the business in which he is engaged, and enjoys a large and extended acquaintance with the trade throughout this section. The reputation and high standing always maintained by the old house of F. Sellers & Co. is safe in the hands of the present enterprising proprietors of this extensive establishment.

PETER CONNELLY,—*Soho Blacksmith Shop, Second Av.*

Every one who owns or uses horses and wagons is interested in having them properly shod and ironed. For that reason we desire to call the attention of readers of this work to the establishment of Mr. Peter Connelly, who is a practical horse shoer and general blacksmith, and understands well how a shoe should be fitted to a horse as a shoemaker does the fitting of a shoe to the feet of men or women. He also does all general blacksmithing, ironing wagons, carriages, or buggies, manufactures spikes and bolts for barges and boats, and does all general job work, in this line, promptly to order. Mr. Connelly is a gentleman whose knowledge and experience entitles him to a liberal patronage and the esteem and confidence of the public. He first started in the business in 1848. He was born in Ireland, in 1825, and came to this city in 1832. He was one of the auditors of Pitt Township for eleven years, also served four years in this capacity for Oakland Township, and holds the position of councillorman from the 14th ward. His shop on 2nd ave., in 14th ward, is largely patronized by city and country. He employs three hands, and his shop is two stories and 38x100 feet in size, so there is room for all.

MRS. J. C. HEINTZ,—*Dry Goods & Notions, 1401 Carson St. South Side.*

This establishment was founded by Mr. Jacob C. Heintz (since deceased), in 1864. Mrs. Heintz, successor to the business, occupies the spacious building, 24x80 feet in size, at No. 1401 Carson street, corner of Fourteenth, and carries a stock ranging in value from \$6,000 to \$7,000, consisting of a full assortment of Ladies' Dress Goods, Trimmings, Notions and Small Wares in great variety. The specialty of this house is Dress Goods. Her annual sales will reach from \$12,000 to \$15,000. Mrs. Heintz devotes her personal attention to the buying and general management of the business, and her taste and judgment is highly commended by the ladies of the South Side and vicinity.

STRAUB & SON,—Brewers, 152, 153, 154 & 155 Canal St., Allegheny.

The increasing demand for wholesome beer is regarded as a favorable sign even by temperance people, and had all our home brewers made as pure a quality of this article as has always been made by Messrs. Straub & Son, foreign beer would never have a foothold in this city. It is undeniably true that no firm in the world can produce a better article than has always been manufactured by Messrs. Straub & Son. The head of this firm is perhaps the oldest brewer in this city, and brewed the first beer made in Pittsburgh. The main brewery and general office is located at 152, 153, 154 and 155 Canal street, Allegheny, and is as perfect in all its arrangements as a life-long experience could make it, in its enlarged and improved condition. The business part of the concern is mainly in charge of the junior member of the firm, Mr. Theo. F. Straub, a gentleman of high character and abilities. He is a native of this city with the interests of which he has been closely identified all his life. He held the position of revenue inspector of the 23rd district for two and-a-half years, an office he filled with honor and credit; he has also been connected with the interests of his city and community in different positions of public trust, in all of which he has shown himself possessed of executive ability, together with integrity and an unblemished character. The prominent position occupied by this firm of late years and its successful achievements under trying circumstances, is largely due to the earnest effort, close attention and high business qualifications of this gentleman, who is also perhaps one of the most accomplished and skilled brewers in the United States.

The firm in their large business transactions have been ably assisted by Mr. John H. Stotz, who is well and favorably known to all the friends and patrons of the house, having been associated with the concern for many years—a gentleman of high abilities and an accomplished financier. A younger son, Mr. Jno. H. Straub, a popular and courteous gentleman of ability and character, also gives his attention to the business, and is well and favorably known and highly esteemed. In this connection it may be proper to state that Mr. A. W. Straub, member of the great and wealthy brewing firm of Julius Winkelmeyer & Co., of St. Louis, Mo., is also a son of J. N. Straub, Esq. This firm also own the Union Brewery 16th ward, Pittsburgh, one of the best breweries in the city, under the supervision of Mr. Herman Straub, which produces the finest quality of beer, a third concern owned by this firm in Allegheny, is not at present used. The life of the senior member of this firm is an eventful, romantic and remarkable one; it has ever been characterized by a determined energy and perseverance even in the midst of misfortunes sufficient to dishearten many a strong man. Mr. Straub was born in Germany in 1810 and learned the trade of cooper and brewer, it being a law in that country that no person could become master of his trade without a practical business knowledge. Mr. Straub, after completing his apprenticeship packed his knap-sack and started upon his travels to acquire that experience requisite to his success as a master workman. Hearing much talk of the great republic beyond the seas, he became fired with an ambition to seek his fortune in the new world, and accordingly invested all his capital in a ticket to the United States, and arrived in Baltimore, Md., on the 4th of July, 1831. A stranger in a strange land, among people speaking a strange language, in the midst of the noise and confusion incident to the day, and without a dollar in his pockets, the sensations of this young emigrant may be better imagined than described. Almost the first object that greeted his sight upon landing was a robust negro woman, the first colored person he ever saw; in wonder and amazement he gazed upon her ebony countenance for some time and felt certain in his mind that the mother of his satanic majesty was grinning him a welcome to “the land of the free and the home of the brave.” Looking around for a time he discovered a line of heavy wagons about leaving Baltimore for the West, and with the driver of one of these Mr. Straub secured a passage, agreeing to assist in caring for the horses and performing such other duties as might be required of him. Arriving at Greensburg, in this State, where the owner of the team resided and owned a farm, Mr. Straub was given work in the harvest field at reaping grain, but on the second day he cut his fingers so severely as to incapacitate him for further labor in that line. He shouldered his knap-sack again and pushed on to Pittsburgh, where he was soon fortunate enough to form the acquaintance of a tavern keeper who had come from the same portion of Germany where he was born, and who furnished him with lodgings and secured for him a position to work at his trade as cooper. He remained at this place for awhile, earning barely sufficient to pay his board. He next engaged with a carpet weaver by the name of Smith, with whom he remained for two years, leaving his wages in his employers hands, at the expiration of that time desiring a settlement he was astounded to find that Mr. Smith was unable to pay him a cent. Almost disheartened he determined to return to the Fatherland, and being penniless resolved to work his passage home, making arrangements to accompany a teamster to Baltimore as assistant, he repaired to the place of rendezvous, but found to his dismay that the wagon had gone without him. In sore distress at this new misfortune the young man sat down and wept; plucking up fresh courage, however, he repaired to the man who had previously befriended him and was again assisted in obtaining employment at his trade. He worked industriously for two years and succeeded in saving a little money. About this time he became a member of the “German Greys,” the first independent German military company organized west of the mountains. In 1834 Mr. Jacob Beyerly, a well known tailor of that day, proposed to Mr. Straub that he should engage in the manufacture of beer, kindly assisting him by becoming his security in starting the business on Third street. This was about the commencement of the beer brewing business in Pittsburgh which has since attained such a magnitude. Mr. Straub commenced with a single six barrel kettle, manufacturing his own beer and barrels and delivering it himself to his customers on a wheelbarrow. During the first two or three years his business was quite satisfactory, although his sales of yeast in lots of one to ten cents worth amounted to more than his trade in beer during that period. He was frequently compelled to let even his small brewings go to waste for want of a demand. About this time Mr. Straub married an estimable lady to whose economical and saving traits he acknowledges his indebtedness for his first accumulation of property and success in business. In 1843 he removed to Allegheny City, where he purchased some real estate and engaged in brewing on a more extensive scale. He subsequently opened the well known establishment in the Pittsburgh Diamond, of late years known as “Roths,” which is probably the oldest beer house in the city. He carried this on one year alone, and then engaged Mr. John Roth as bar keeper, subsequently admitting him to an interest in the business, and then turning over to him the entire establishment, furnishing the beer from his Allegheny brewery. In 1849 Mr. Straub commenced the manufacture of lager and the demand at retail being large he made a great deal of money. In 1858 his brewery was destroyed by fire with a very large stock, which was a total loss, the fire occurring on Sunday and his insurance policies expiring the day before. Although Mr. Straub made every effort to find the agent of the company and have them renewed in time, he was unable to do so, and having his entire capital invested in the business he found himself again without funds or means. Possessed, however, with a stout heart, a good reputation, unblemished credit and hosts of friends, he was soon “on his feet” again and the work of rebuilding was pushed rapidly forward. Mr. Straub constructed a number of caves for storing beer along the line of the Pennsylvania railroad about this time, portions of which are yet to be seen. In 1861 he determined to retire from active business and sold out his brewery. He soon afterwards again became interested in the business and now at the age of seventy years he is the principal owner of three breweries, two of which that are now being run he gives his personal attention, with the assistance of his sons previously referred to.

GIBSON BLAYNEY,—Flour & Feed, 91 Webster Av.

We gladly give space to the enterprising Flour and Feed establishment of Mr. Gibson Blayney, located at No. 91 Webster avenue. The business to which Mr. Blayney succeeds, is one of the long established business houses of this part of the city, but which came into the hands of the present proprietor in 1870. He transacts a wholesale and retail business in choicest brands of family flour, also oats, corn, baled hay, bran, chops, mill feed, etc., and delivers to all parts of the city. His business room is 20x100 feet in size and affords ample storage room. Mr. Blayney was born in Ireland in 1843, and came to this city in 1865, and first commenced business in this city in 1867. His industry and excellent business qualifications has won him a large circle of friends and patrons.

MATHEW LANZ & SON,—Bolts, Nuts & Washers, &c.,*Twenty-Ninth and Carson Sts., South Side.*

One of the leading houses in the city engaged in the manufacture of specialties in the iron working line is that of Mathew Lanz & Son, whose office and works are located at the corner of Twenty-ninth and Carson streets, South Side. This firm manufactures Patent Hot Pressed Nuts, Machine and Pitt Car Bolts, Screw and Drift Bolts, Coach and Lag Screws, Corner and Rake Bands for barge yards, Washers, Patent Screw Hook Strap and Screw Hook and Eye Hinges, Wrought and Cut Spikes, Nails, etc. The works were originally established in 1866 by Messrs. Price & Co., and from that time until 1877 they changed hands several times, when the present proprietors assumed the management and control, introducing several improvements and changes and materially increasing the facilities and capacity of the establishment. The capital invested in the business has been considerably increased and now amounts to \$40,000. They occupy three large and conveniently arranged buildings, covering an area respectively of 40x100 feet, 35x60 feet and 30x40 feet, fitted up with the most complete and permanent machinery, especially adapted to the requirements of the business, among which particularly noticeable is a patented machine of their own invention for the manufacture of screw hook strap hinges, and a patent improved machine for pointing spikes and harrow teeth. Several other ingenious devices, tools and machines are required in the manufacture of their peculiar products. A thirty-horse power engine and a boiler 28 feet in length and 40 inches in diameter furnishes the motive power required in this establishment, and from five to fifteen skilled workmen find employment in the various departments, in which they transact a business of about \$20,000 per annum. The facilities enjoyed by this house are not surpassed by those of any similar establishment in the United States. The Nut and Bolt trade of Messrs. Lanz & Son is principally local, but their Hinge trade extends over all portions of the Union, East and West, and from Canada to the Gulf. Mr. Mathew Lanz, senior member of the firm, is a native of Germany, born in 1826. He came to this city in 1853, and has since resided here and for a greater portion of the time been actively engaged in business. His experience has been a chequered one and he has met with many misfortunes as well as successes; but with that untiring energy and perseverance which has ever characterized his business career, he has at last succeeded in overcoming all obstacles and stands to-day among the most prosperous and successful representative manufacturers of our great industrial metropolis. Mr. Charles Lanz, his son, and junior member of the firm, was born in Pittsburgh in 1856 and is an energetic, active and practical business man.

L. BENZ & BROS.—Contractors and Builders, 125 Twelfth St., South Side.

The business now conducted by the firm of L. Benz & Bros. was founded in 1848 by Mr. L. Benz, senior, father of the present proprietors, and conducted by him until 1873, when it passed into the hands of Lawrence Benz, Ferdinand Benz, John Benz and Philip Benz, under the firm name above given. These gentlemen occupy two extensive lots, one covering an area of 96x110 feet, and one 120x160 feet, and two two-story buildings, one 20x60 and another 36x90 feet in size, for the storage of their lumber and the manufacture of finished work pertaining to their line. One forty-five-horse power engine with a boiler 22 feet in length and 42 inches in diameter, furnish the motive power. These gentlemen are prepared to furnish estimates and contract for the construction of any desired style of dwelling, business block, church edifice, public or private buildings in the most thorough and workmanlike manner and at the most reasonable rates. They carry constantly on hand a stock of about \$12,000 and their annual business reaches from \$50,000 to \$100,000. The number of hands employed varies according to the season, but will average twenty-five, with a monthly pay-roll of not less than \$600. Mr. F. Benz is book-keeper and manager of the clerical department, while the other members of the firm are all practical mechanics and are thoroughly conversant with the various departments of the business. They have had long experience and thorough instruction under the able and successful management of their honored father and predecessor. They are natives of this city, where they have resided all their lives. They are enterprising business men and enjoy the confidence and esteem of all with whom they are brought in contact. The firm is justly entitled to a prominent position among the representative manufacturing and business houses of Pittsburgh.

H. F. BRUGGEMAN,—Wholesale and Retail Grocer, 537 & 539 Penn. Av.

The extensive Wholesale and Retail Grocery establishment at Nos. 537 and 539 Penn avenue was founded in 1863 by Mr. H. F. Bruggeman, the present proprietor, in a small way at first and with a capital of only \$50. Mr. Bruggeman learned the business with his brother, who had for a number of years previously been engaged in the same line of trade. He now occupies two four-story brick buildings, one 40x40 and one 40x60, at the numbers named, where he carries a full and complete stock of choice Family Groceries, Fruits, Sugars, Coffees, Teas, Spices, Havana and Domestic Cigars, Manufactured Tobaccos, Fine Flour, etc. His average stock is about \$10,000, and his annual sales will exceed \$30,000. Eight assistants are employed. One room is devoted exclusively to the sale of Cigars, Tobacco, Canned Goods and Fancy Groceries, of which articles Mr. Bruggeman carries an extensive stock, and his establishment is the leading one of its kind in this section of the city. Mr. Bruggeman was born in Germany, but has resided in Pittsburgh for the past fourteen years.

JAMES OWENS,—Plastering, Cement, etc., 72 and 74 Seventh Av.

One of the most practical, ingenious and skilled Contractors and Jobbers in this line in the city of Pittsburgh is Mr. James Owens, whose place of business will be found at 72 and 74 Seventh avenue. Having thoroughly mastered the business, he started in 1855 in a small way, but his skill soon brought him success. He carries in season a full supply of everything needed in his line and is now doing a business that will reach about \$1,600 per annum. He occupies part of a building 35x80 feet in size, where he may be found, when not engaged upon work, and where all orders for work may be left. His business embraces Plastering, Cementing, Mastic (he was the first person to introduce the latter in this city), Kalsomining and Paper Hanging, Grates Set, Chimneys Topped, and all work of this kind executed promptly on reasonable terms. He has a peculiar kind of fine wash for coloring brick and stone houses, which will preserve them against water and weather equal to the best oil or paint. His specialty is Stucco Work, Mastic, and his new process of Water Coloring. He was born in Ireland in 1833, and came to this city in 1847.

J. F. MOORE,—Carpenter and Builder, 72 and 74 Seventh Av.

One of the best skilled carpenters in this city is Mr. J. F. Moore, whose place of business can be found at Nos. 72 and 74 Seventh avenue, where he occupies an office and shop 35x80 feet in size, with ample yard room, and giving employment during the busy season to from six to eight hands. He takes contracts for all kinds of buildings and is competent to perform the best and most artistic work in this line, acknowledging no superior in the city of Pittsburgh either in skill or promptness. The business was originally started by him in 1872 with moderate capital, but backed by determined energy and a consciousness of thoroughly understanding the business in all its details. He soon met with abundant employment and is now doing his full share of business, which will average about \$3,500 per annum. He has secured some of the best buildings in the city and never fails to give satisfaction in his work. He was born in Ireland in 1847, and came to this city in 1862. He is a pleasant gentleman to deal with and reliable in all his business transactions.

LIVINGSTON & CO.—*Novelty Works, Iron Founders & Mfs. of Builder's Hardware,* 243 to 253 Washington Av., Allegheny.

The large and extensive manufactory of Livingston & Co. is situated on Washington ave., Allegheny, near the P. F. W. & C. R. W. and is one of the largest and most complete establishments of the kind in the United States in their specialty of light cast Hardware. The business was first established in 1866 on a small capital, by W. H. Burt & L. O. Livingston, and has rapidly increased, until it now reaches the large and magnificent sum of \$100,000 per annum, with a stock on hand of \$20,000. The building is a large two-story frame, 144x144 feet. The firm have about 35 hands constantly employed, and their pay-roll foots up to \$250 per week, and their trade extends all over the United States and Canada. They are largely engaged in the manufacture of the monitor corn sheller, a neat, durable and simple machine, weighing only about 15 pounds, and capable of shelling a bushel of corn in five minutes. The most perfect hand corn sheller ever invented. There are over 20,000 now in use, and thousands of testimonials bear witness to their excellence and superiority. They have taken the medal and first premiums at the Pittsburgh Exposition, and wherever exhibited. Every sheller is warranted. Every farmer and poultry raiser needs one, and the low price places them within the reach of all. The price of the sheller with separator is only \$5, and the price without separator \$5. One engine of 30-horse power and boiler are used. The members of the firm are both Eastern men. Mr. L. O. Livingston was born in Vermont in 1836, and W. H. Burt in Northampton, Mass., in 1832. They are men of enterprise, deserving of success in their undertaking. The firm are also extensively engaged in the manufacture of fine light castings of all kinds, plain, japanned, bronzed and galvanized, made to order promptly. They make a specialty also of light castings for agricultural implements and light machinery, and particular attention is called to their family grist mill for farm and plantation use, and costing but the small sum of \$12. Send for circulars and price list, &c., containing full information. Address, P. O. Box 302, Pittsburgh, Pa.

RED TOP BOTTLING CO.—*G. W. Holt & Co., 1041 Penn Av.*

The young and enterprising firm of G. W. Holt & Co., engaged in the manufacture and bottling of Birch Beer, is located at 1041 Penn ave., where they began the business in quite a limited manner, with small capital, in 1878, doing business under the name of the Red Top Bottling Co. The firm is composed of G. W. Holt and Jno. W. Friesel, both of whom are young men of character and ability, and are pushing their business in characteristic style. The article manufactured and bottled by these gentlemen, Birch Beer, is a delightful and refreshing beverage, possessing many valuable tonic and medicinal properties, as well as being a very agreeable and pleasant drink. It is in this respect superior to sarsaparilla, which in color it resembles, and which it is in many cases supplanting, as well as mineral water. It contains no alcoholic properties whatever, and in this respect can meet the approval of the most ultra temperance people. The manufacture and sale of this beverage is yet in its infancy, and it will in time, doubtless, reach large proportions. They use a patented cork and neat bottles, and their trade mark, which is copyrighted, is a "Red Top" on all bottles. Their capacity now is 2400 bottles per day. G. W. Holt was born in Pittsburgh in 1854, was raised on a farm near the city. He was employed in grocery stores in the city for 5 years, where he gained a practical and useful business knowledge. He was afterwards engaged in saloon business in 1876, which he shortly closed out and quit, and embarked in his present enterprise. Mr. Friesel is also a native of Pittsburgh. He is now, and has been for a number of years, engaged in the coffee roasting, leaving his partner, Mr. Holt, to manage the bottling business.

JOHN U. BARR,—*Architect, 42½ Sixth Street.*

Mr. John U. Barr, one of the most famous and successful architects of this section, was born in 1815. At an early age he emigrated to Muskingum County, Ohio, where he learned the trade of house carpenter. Having a natural taste for designing, he devoted his attention to the study of architecture at Philadelphia; came to Pittsburgh in 1836, and by industry and close application soon became master of the profession which he has followed for the past thirty-eight years with most gratifying results. He is probably the oldest architect in this section actively engaged in this line of business, and the number of public and private buildings erected under his supervision is greater than can be shown by any other member of the profession. Among some of the most notable we may mention the Armstrong County court house, the Allegheny City buildings, the Allegheny work house, the Pittsburgh market house, Mercer County court house and jail, and hundreds of other structures, including churches, colleges, factories, hotels, business blocks and private residences throughout the country. Mr. Barr is prepared to furnish plans and specifications for any kind of public or private buildings and superintend their construction at the most reasonable rates. Mr. Barr has two sons, Mr. John U. Barr, Jr., twenty-three years of age, is also an architect by profession, and Mr. S. A. Barr, who occupies the same office, is engaged in the real estate and insurance business.

ARNOLD KOCH,—*Pharmaceutist, No. 1203 Carson St., First Nat. Bank Building.*

An important feature in connection with the business of any city are its well conducted drug establishments, and in a comprehensive work which presents in a permanent and attractive manner the business facilities of this city, we take pleasure in noticing the excellent and popular drug house of Mr. Arnold Koch, located in the First National Bank Building, No. 1203 Carson street. This business was originally started by Mr. Koch in 1862, opposite his present location, to which he removed in 1875, with ample capital to conduct a No. 1 drug store, and where he has enjoyed an excellent patronage. He carries at present a stock of about \$8,000, and is doing a trade that will average about \$9,000 annually. He occupies a handsome three-story brick building, 18x70 feet in size, embracing three departments, and employing two competent assistants. The stock embraces a full line of Pure Drugs and Medicines, all popular and desirable Patent Medicines, Perfumeries and Toilet Articles, and all such articles as are usually associated with a first-class drug house in our larger cities. Special attention is given to the preparation of physician's prescriptions, which are carefully compounded from purest medicines. Mr. Koch was born in Germany, Oct., 1838. He began study in 1852, was educated and graduated as druggist in 1857, came to this country the same year, and to this city in 1861. He makes a specialty of German and other rare drugs. An accomplished druggist and scientific chemist, he richly deserves the popularity and confidence he receives.

F. C. GREINEISEN,—*Druggist, 746 Carson St.*

The increase in the population and constant growth of the city must have its legitimate effect upon the general business of the 34th ward, and in connection with the leading business houses of this section of the city, we take pleasure in noticing the enterprising drug house of Mr. F. C. Greineisen, which was started by himself in 1869. He was burned out in 1874, but, with becoming spirit of enterprise, he rebuilt the same year, and has since been in the enjoyment of a very excellent business. He occupies a two-story brick building, 23x40 feet in size, and has it well stocked with pure Drugs and Medicines, Popular Patent Medicines, Perfumeries and Toilet Articles, Notions, &c., and being a thorough druggist, with a comprehensive knowledge of materia medica, takes special pains accurately to compound and fill physicians prescriptions, either in English or German. He carries a stock of about \$3,000, and transacts a business of about \$5,000 per annum. Mr. Greineisen was born in Germany, in 1846, and came to this city in 1866. He will not only be found a good druggist, but a pleasant and accommodating gentleman. He served the regular apprenticeship in Germany, and graduated in 1864.

KEYSTONE CHAIN WORKS,—Eisenbeis & Helm,

Cable, Shipping, Crane, Quarry, Rafting, Railroad and Agricultural Chains, Rail Road St., bet. 28th & 29th Sts.

The manufacture of chains of all descriptions is in a measure a new industry in Pittsburgh, but there is no reason why it should not assume vast proportions in the near future, as no other point in America affords more perfect facilities and advantages for its successful manufacture. Heretofore foreign makers have supplied the American markets, but American enterprise and capital will, ere long, drive English chains from our markets, as it has done most other products of which iron is the basis. The firm of Eisenbeis & Helm manifest the characteristic enterprise in an eminent degree, and have entered a field affording them the largest opportunities for the exercise of their abilities and energy. The building occupied by the firm is large and commodious, affording ample facilities, and is very conveniently arranged throughout and well located, affording the best facilities for shipment and receipt of material. The works are supplied with machinery necessary in the business, consisting mainly of dies and welding machines of peculiar construction, which do the work in the most perfect manner, which, when operated by a skillful operator, makes a weld of so perfect a form as to defy detection. The machinery is driven by a fine engine of ample power. The heating furnaces are novel and perfect in construction, being patented and owned by this firm. They are so constructed as to heat the links for welding in a perfect manner, giving a clean heat, entirely free from sulphur, and in every respect of the most convenient form. But the most perfect piece of machinery used, the invention of Mr. Helm, and the patent for which is owned by the firm, and which is used exclusively by them, is the link cutter, an apparatus that receives the iron to be used from the rolls, and cuts it into links in the most perfect manner, of any desired size, at an astonishing rate of speed. This, in connection with the other appliances and improvements, gives to this firm the great advantages they possess over their cotemporaries, and enables them to produce chains of a quality equal, if not superior to any brand in the market. In building their industry and getting their works under full headway, as is usual in all new enterprises, many difficulties and obstacles had to be surmounted, and are still met with, among them the difficulty in procuring skilled operatives and competent forgers to work their machinery; but these are being rapidly overcome. Although but a short time in the business, they have already been pressed with orders, and their works are taxed to their present capacity to supply their rapidly growing trade. Mr. Eisenbeis, the business manager and head of the firm, is a native of this country, born in 1837. He was, previous to engaging in his present industry, engaged in the drug business in Allegheny. He brings into the business a large business experience and great energy. Mr. Helm is a native of Germany, but has resided in this country over 25 years. He is a thoroughly practical iron worker, having been engaged all his life in that branch of industry. He spent many years perfecting the machinery that is now so successfully used by the firm, and brings into it large practical experience as a mechanic and inventor.

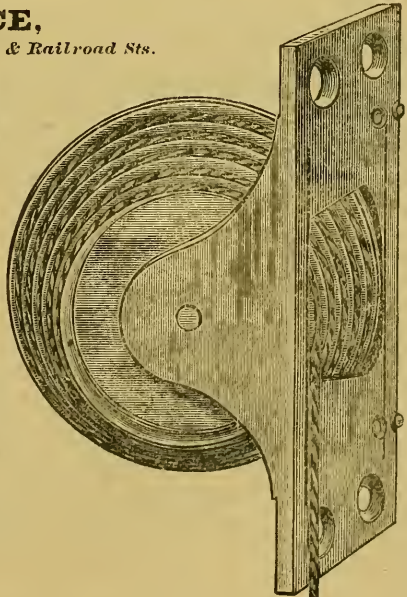
WM. G. PRICE & CO.—Iron Founders and Plumbers' Materials, 33 Wood St.

Few houses can trace back their origin anterior to that which forms the subject of the present sketch. Originally established in 1810 by Mr. Wm. Price, grandfather of the present senior member of the firm, the business was subsequently conducted by Mr. Wm. G. Price son of the founder and father of the present proprietor, from 1855 to 1873, when he was in turn succeeded by the firm as it now stands. The office and warehouses of this establishment are located at No. 33 Wood street, corner of Second avenue, their foundry and works covering more than one acre, being bounded by Fifth avenue, Price and Colwell streets. Here sixty men are constantly employed, with a semi-monthly pay-roll aggregating about \$1,000. The foundry and machine shops are fitted with all the best and latest improved machinery required for the production of the various articles manufactured by them, which consist principally of articles especially pertaining to plumbers' use, embracing iron pipe and fittings, water and gas pipe, window weights, iron sinks, etc., dealing also in every kind of plumbers' hardware and supplies, lead pipe, brass cocks and fixtures. Their trade is largely derived from the leading cities in the Western States and will amount in round numbers to not less than \$100,000 per annum. For nearly seventy years this house has enjoyed a wide-spread and deservedly high reputation for the uniform excellent quality of their products, which meet with a ready sale. Mr. Wm. G. Price is a native of Pittsburgh and was born in 1852. He is an energetic, enterprising business man, and under his able and judicious management the high standing of this old-established and reliable house will be maintained in the future as it has been in the past by his immediate ancestors.

THE ANDERSON SASH BALANCE,

O. K. GARDNER, Manufacturer, 28th & Railroad Sts.

The Anderson Sash Balance and the Patent Car Window Balance are two important inventions, which have stood the test of time, and are pronounced by all who have used them to be the most perfect devices yet introduced for the purposes for which they are intended. They are designed to do the work and take the place of weights and pulleys in windows by the combination of a spring and cone adjusted to the weight of the sash, so as to form an exact balance, possessing all the advantages of weights with none of their defects. When properly adjusted the sash hangs at an exact balance, and no force or power is required to raise or lower the window. The sash balance is highly commended by architects, builders and house-keepers, and the Car Window Balance has been adopted by the Pennsylvania Railroad Company, and used exclusively on their cars for the past five years, giving perfect satisfaction. They are also used by the Pullman Palace Car Company on all their cars. The Balance was invented by Mr. J. C. Anderson in 1869. A stock company was originally organized to manufacture and introduce the improvement, under the name and style of the Anderson Balance Mfg. Co. In 1876 Mr. O. K. Gardner became sole proprietor and manufacturer of the Balance, and he has since been pushing its sale vigorously and successfully. The works now occupied by him, at the corner of 28th and Railroad streets, cover an area of 50x75 feet, and are supplied with all the machinery and appliances necessary to carry on the business, which is increasing from year to year as the merits of the balance become known and appreciated throughout the country. His trade extends throughout every portion of the United States. Mr. Gardner is a native and life-long resident of Pittsburgh. He was formerly engaged in the business of contractor and builder, and is well known and highly respected, both in the social walks of life and in the business community.



ALLEGHENY STEAM LAUNDRY, Dyeing & Scouring Works,

Charles Pfeifer, Proprietor, 353 & 355 Beaver Av., Allegheny.

This extensive establishment, which is one of the largest and most complete of its kind in the West, was founded in 1869 by Mr. Charles Pfeifer, the present proprietor, and his brother, with capital amply sufficient to meet all the requirements of the business at that time and which has since considerably increased. Mr. Pfeifer now occupies the spacious two-story double brick structure 40x50 feet at Nos. 353 and 355 Beaver avenue, Allegheny, with a central receiving office at No. 54 Federal street, near the Ft. Wayne depot. The business is systematically conducted in six different departments, each being in the hands of skillful and accomplished workmen assisted by labor-saving machinery of the most approved styles and designs, including one twelve-horse power engine, one cylinder boiler 15 feet in length and 36 inches in diameter, one very large and complete cylinder washing machine and a number of smaller ones. One mammoth machine intended expressly for washing carpets, blankets and heavy articles and a variety of other appliances and apparatus, especially adapted to work of this description. He has a new method of cleaning carpets worthy the consideration of every family. The *Glycerine Carpet Paste* has been fully tested and is warranted in every particular. By this means he cleans carpets without taking them from the floor. The process is quick, perfect and warranted to give satisfaction. Send and get circular explaining all particulars. Mr. Pfeifer has had many years practical experience in the dyeing, scouring and refinishing business, and his works now rank among the foremost establishments of the kind in the United States. Among the specialties for which he is noted is the dyeing, cleansing and refinishing of ladies' dress goods of every kind, shawls, gloves, plumes, lace and damask curtains, velvet, Brussels and ingrain carpets, and all kinds of gentlemen's and children's clothing. In the laundry department particular attention is devoted to doing first-class work, especially in shirts and ladies' fine underwear. Orders by mail are promptly attended to and goods are called for and delivered in all parts of the two cities. Mr. Pfeifer is a native of Germany and was born in 1830. He came to the United States while but a boy and has resided in Allegheny since 1869, and been actively engaged in business during the entire period. He devotes his personal attention to the general supervision of his extensive business in which he has a capital invested of not less than \$10,000 and his annual receipts will reach \$12,000 to \$15,000. He has fifteen assistants regularly employed in the various departments of his establishment with a monthly pay-roll averaging about \$400, and his trade extends over the two cities and the adjacent towns and counties of Western Pennsylvania.

L. BEINHAUER & SON,—Livery and Sale Stables, 12th & Bradford Sts., S. S.

In addition to the business of Livery and Sale Stables, Messrs. Beinhauer & Son transact a general Undertaking business in all its branches. The present firm succeeded L. Beinhauer & Co., by whom the establishment was originally founded. The amount of capital invested is about \$7,000 and the average valuation of stock on hand is not less than \$5,000. Their stables are equipped in first-class style with excellent horses and carriages of every description and the undertaking department is as complete as that in any similar establishment in the city. Orders left at No. 114 Grant street, opposite St. Paul's Cathedral, will always receive prompt attention. They occupy the premises corner of Bradford and 12th streets, with a building 24 feet square and stables fronting on Bradford street 40 feet and extending back 70 feet. The business of the firm amounts to not less than \$4,000 per annum. Mr. L. Beinhauer was born in Germany in 1826 and has resided in this city since 1853. His son, Mr. F. C. Beinhauer, was born in Butler county, Pa., in 1858, and with his father has been engaged in the present line of business for the past seven years.

M. J. DORMER,—Marble Works, Fountain St., near Seventh Av.

This business was started by Mr. Dormer and has been carried on with uniform success. He manufactures and deals in all kinds of Foreign and American granite and marble monuments, tombstones and slabs, and also house marble work, mantels, bureau stand and other marble work, in fact everything in the line executed in best style and at most reasonable prices. Mr. Dormer is one of the most skilled workmen in this line in the city, and turns out the neatest and most elaborate work. He employs three first-class workmen with other assistants. Mr. Dormer was born in Ireland in 1836, and came to this country in 1846, and soon after to this city. The high esteem in which deceased friends are held entitles this business to consideration among the industries of the city, and Mr. Dormer is a highly esteemed and worthy citizen and tradesman.

IRON & GLASS DOLLAR SAVINGS BANK,

Cor. 12th & Carson Sts., South Side.

This organization was effected in 1870, and two years later (March 5, 1872,) was incorporated under a special charter with a capital of \$100,000, which might be increased optionally to \$250,000. The operations of the bank are strictly legitimate, consisting in loans, discounts, exchange, collections and transient or time deposits, the latter bearing interest at 4 per cent. The officers are as follows: President, Thos. B. Atterbury; Henry Stamm, Cashier; Directors, Messrs. T. B. Atterbury; John Adams, of Adams & Co., Glass Manfr's.; F. Baxmyer, Wm. Cowan, John Davis, Wm. Doyle, John Gallaher, Edward Hogan, E. P. Logan, John Phillips, H. M. Rolfe, J. H. Swett and D. Wenke. With such management a surplus has been accumulated of \$2,500 and dividends paid to an aggregate amount of about \$70,000. In short the Iron and Glass Dollar Savings Bank is a solid financial concern, in which the confidence of the public is not misplaced.

JOHN J. BALLARD,—Manuf'r. of Cigars & Tobacco, 12 Wylie Av. Extension.

This business was started with small capital, which has been increased since, keeping a general assortment of the various brands of Havana and domestic cigars, including fine tobacco manufactured by himself, besides the different brands of tobacco and snuff, pipes of every style and variety. Mr. Ballard is a practical cigar maker, employing skillful assistants and making a specialty of manufacturing tobies. He sells both wholesale and retail at his place of business, where he has quite an extensive trade and gives the amplest and fullest satisfaction, giving his personal attention to the selection of his stock as well as to the manufacture of his cigars.

F. BAXMYER & CO.—Groceries and Provisions, No. 6, 7, 8 & 9 Diamond, South Side.

Among the notable and enterprising Grocery Houses of the South Side and indeed of the city, is that of Messrs. F. Baxmyer & Co. The business was begun by Mr. F. Baxmyer in 1858. After conducting it for some years, he associated with him his son and son-in-law, who have rendered valuable assistance toward increasing the usefulness of the establishment and increasing the trade with each succeeding year. They aim to carry a full and diversified stock of Groceries and Provisions, desirable for household and table use, at very low figures, also Flour, Feed, Grain, Seeds and Implements. They do an annual business of not less than \$45,000, and their store has become one of the most popular trading places on the South Side, as well as enjoying a good country trade. They also have an agricultural department, keeping Farmer's Tools, Machinery, &c. Mr. Baxmyer was born in Germany in 1815, the other members of the firm are also natives of "the Fatherland," and for many years prominent business men and resident citizens of this city, South Side.

ABEL, KIM & CO.—Window Glass, 70 Carson St., South Side.

Extensively engaged in the manufacture of one of those great staples upon which is based the prosperity as well as the reputation of Pittsburgh as a producing centre, the firm of Messrs. Abel, Kim & Co. are entitled to more than brief notice in this work. The business was originated in 1867 by Messrs. Knox, Kim & Co., who conducted the same for a decade with marked ability and success, the present firm dating from 1877, under whose management the concern has been enlarged and the capacity increased. The plant is situated as indicated above, and occupies an area of nearly four acres, half of which, or more, is covered by the buildings and factories, the product being exclusively window glass, which requires three main departments in its manufacture, outside of the actual preparation of the glass, these being the blowing, flating and cutting. Seventy-five workmen are employed at these works, entailing an average weekly disbursement of about one thousand dollars. The goods manufactured by the firm are highly esteemed for strength, luster and freedom from flaws and bubbles, and are in demand throughout the Western States, where the bulk of the trade lies; a considerable business, however, being transacted to supply the home and Penn'a market. Honorable, enterprising and prompt the firm is regarded as a desirable one with which to establish relations, which so far as their control extends must be pleasant, profitable and lasting.

HALDEMAN & JOHNSTON,—Coach & Wagon Makers, 89 Third Av.

The firm of Haldeman & Johnston was founded in 1877, and in the short time in which they have been engaged in business have built up a flourishing and lucrative trade. They manufacture every description of coaches and carriages, platform and elliptic spring wagons, flour and oil trucks, package express and delivery wagons, etc., making a specialty of the "coach top" and platform wagons of their own improved design, guaranteeing all their work to be the very best without exception. They also attend to repairing and repainting with neatness and despatch and at reasonable rates. In the three branches or departments of their business, viz.—wheelwrighting, blacksmithing and coach painting, they employ ten skilled and experienced workmen. They occupy the entire three-story building at No. 89 Third avenue, which is supplied with a full complement of machinery, tools and implements, of the best and latest improved designs and styles for successfully carrying on their extensive business. Both members of the firm are thorough practical mechanics in their respective departments, Mr. Haldeman being in charge of the blacksmithing and iron working department and Mr. Johnston of the wood working branch. Mr. Haldeman is a native of Fayette county, this State, and was born June 12, 1850. He has resided in Pittsburgh for the past seven years. Mr. Johnston is a native of the Emerald Isle, but for twelve years has been a resident of this city. The business of this house amounts to about \$20,000 per annum and is steadily increasing, their various vehicles meeting with a ready sale in the two cities and surrounding country.

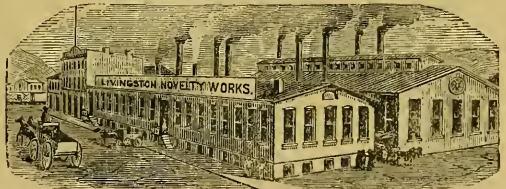
ODD FELLOWS' SAVINGS BANK,—63 Fourth Av.

The Odd Fellows' Savings Bank was organized in 1872 and incorporated under the State law; its officers are among the most esteemed and successful members of this community and are as follows:—Andrew Miller, Esq., President; Geo. W. Rankin, Esq., Vice President; and Samuel C. Applegate, Cashier. The board of directors, besides including the President and Vice President, is composed of Messrs. Edward Duff, A. M. Brown, Esq., John Seiferth, S. J. Wainwright, D. P. Estep, James Gordon, R. H. King, John Woolslair, M. Schuetz, J. K. P. Duff, Jno. M. Horner. The capital of this bank is \$107,000 and a surplus of \$11,000, which, considering the unfavorable financial period through which it has been obliged to pass, is considered as a remarkably fair showing—the bulk of its depositors being among the industrial classes, and the position occupied by it in the confidence of the community is the best evidence of the wisdom of its direction.

LIVINGSTON NOVELTY WORKS,—Livingston & Co.,

M'frs. of Fine Light Castings, Builders' Hardware, etc., 243 to 253 Washington Av., Allegh'y.

In their particular specialty of Fine Light Castings for Agricultural Implements, Builders' Hardware, Light Machinery and miscellaneous small articles of iron, or brass, the Novelty Works of Messrs. Livingston & Co. undoubtedly stand at the head of all similar establishments in the United States. Their large and extensive manufactory is located on Washington avenue, Allegheny City, embracing the numbers from 243 to 253 inclusive, directly opposite the outer depot of the Pittsburgh, Fort Wayne and Chicago Railroad. The building is a large two-story frame structure, covering an area of 144x144 feet, fitted up with one powerful thirty-horse power engine and all the latest improved machinery, apparatus and appliances for carrying on their business in all its departments in which a force of thirty-five skilled workmen are constantly employed at a weekly expense aggregating not less than \$250. They manufacture every description of fine light Castings, Plain, Japaned, Bronzed and Galvanized, using a high grade of A. No. "1" "H. R." Charcoal Iron, which gives a clean, smooth-faced casting, very strong and durable and easy on drill or lathe. They also manufacture Brass Castings to order for Rolling Mills, Engine Builders, Plumbers, Gas-fitters and Locksmiths. The house was founded in 1866 on a comparatively small scale, by A. H. Burt and L. O. Livingston, since which time the business has steadily increased to its present magnitude. The average valuation of stock carried is not less than \$20,000, while their annual sales will reach more than \$100,000. One of the leading specialties of this house for which they have acquired a national reputation, is the Monitor Corn Sheller, the most simple and perfect machine of its kind ever introduced, weighing only about fifteen pounds and with a capacity for shelling a bushel of corn in five minutes. More than twenty thousand of these shellers are now in use in every section of the Union from the Atlantic coast to the Pacific slope, and from the northern boundary of the States to the Gulf of Mexico, and thousands of testimonials bear witness to their superiority and general excellence. They have received medals and diplomas from the Pittsburgh Exposition and wherever else exhibited. Every sheller is warranted by the manufacturers, and as they are sold at the low price of \$5, or with the separator attached at \$6, they are within the reach of every farmer and poultry raiser in the country. Their improved Family Grist Mill, for farm and plantation use, is also deserving of especial notice, answering all the purposes for which it is designed, and sold at the low price of \$12. Circulars and price-lists, containing full information relative to the manufactures and specialties of this house, are sent to any part of the country upon application to the firm, whose postoffice address is Box 302, Pittsburgh, Pa., and orders from all portions of the United States will receive prompt attention and execution. Mr. L. O. Livingston is a native of Vermont and was born in 1836. Mr. W. H. Burt was born in Northampton, Mass., in 1832. They are both active and energetic business men, who by their own ability and exertions have built up in the city of their adoption a large and flourishing business which has added new lustre and fame to the reputation which Pittsburgh has attained as the great manufacturing and industrial centre of the Western Hemisphere.



KING, SON & CO.—Crystal Glassware, Eighteenth St., South Side.

The many improvements that have been made in the manufacture of glass and glassware during the past fifteen or twenty years have nowhere been so pronounced as in Pittsburgh. Whatever may be the cause, the fact has been thoroughly established that our city produces goods in this material not only superior in quality, but of such marked excellence and beauty of design as to defeat all competitors elsewhere in the United States and compare favorably with the products of the most celebrated French factories. Of those houses that have taken the lead in adopting every improvement, that of Messrs. King, Son & Co. must be ranked among the most prominent. This widely-known firm was established in 1866 under the style of Johnson, King & Co., changing to the existing style and status three years later. As far as the facilities for the manufacture of glassware are concerned this house is supplied with every advantage conducive to a large and choice product. The plant is an extensive one, consisting of two factories, two furnaces, with an aggregate of twenty-one pots, and every appliance, with adequate modern machinery, operated by two powerful steam engines. The buildings are respectively 120x286 feet and 60x100 feet in size, where are employed an average force of 125 expert workmen, whose earnings are about \$1,200 per week. The trade of the house amounts to about \$125,000 annually, and is increasing more rapidly than that of many of its cotemporaries in the same branch of the business, and already extends not only over the entire Union, but reaches the Canadian provinces and foreign markets. Many of the goods made by King, Son & Co. are manufactured under letters-patent held exclusively by them. A candy-jar with gum ring and glass-covered top, which is coming into universal favor, is so protected, and numerous other articles in the line of table ware, bar ware, blue and white-rim jars, preserve and jelly glasses and jars of new and attractive designs. Mr. Wm. C. King, the senior partner and manager of the concern, is well known in the community as an enterprising and resolute man. Under his direction the business policy of the firm is honorable, liberal and progressive in every respect, and for these high characteristics has attained a position at once creditable and substantial.

C. G. HUSSEY & CO.—Copper & Brass Rolling Mills,

Office, No. 4, Fifth Avenue; Works, Second Avenue and Monongahela River.

The house which forms the subject of this brief notice was founded thirty years ago by Dr. C. G. Hussey and Charles Avery, Esq., under the same style as at present, though Mr. Avery died in 1858, when the Hon. Thomas M. Howe succeeded to his interest. The capital, though ample at the inception of the concern, has been greatly augmented since, and the works are now as large as any of the kind in the country. The mills consist of three large buildings with numerous smaller ones, covering an area of about four acres. The operative work is divided into four departments, viz.:—rolling mill, brass, smelting and planishing works, requiring a force of one hundred men, three large engines, stamping machines and other improved mechanism for planishing, cutting, turning, etc. Many of the processes employed by this firm are not only comparatively new inventions, but add greatly to the perfection of the work and a higher degree of finish than hitherto attained. Especially in the matter of planished copper this firm claims substantial advantages for their product. They have new machinery, combining the latest improvements under the Hayden and Minard patents, for the manufacture of brass kettles, which they offer of superior quality, unsurpassed either in shape, finish or material, and at the lowest market rates for such grades. Of unlimited resources and commercial experience, the firm stands second to none as exponents of the results to be achieved by thrift, integrity and enterprise.

STEWART, ESTEP & CO.—Druggists' Glassware, Window Glass, &c.,

Jane and 22nd Sts., South Side.

In a careful review of each separate establishment engaged in the manufacture of glass in this city, it would be impossible to overlook the extensive works of Stewart, Estep & Co., which with a product of 2,800,000 square feet of window glass per annum are entitled to rank among the largest concerns engaged in this branch of industry. The establishment of this business may be ascribed to Melling, Estep & Co., which firm was composed of the present members and one Charles Melling, Esq., and others, who constructed the plant in 1866. In 1871 Mr. Melling with five other members retired and the firm style with the remaining members was changed to its present form. The works cover an area of nearly two acres, and consist in part of two furnaces having 16 pots and two factories, besides packing, cutting and flattening rooms, etc. Here are employed about seventy-five skilled workmen to pay, whom a weekly disbursement is necessary to the amount of nearly \$1,500, and here also will be found the best machinery and appliances yet devised for the manufacture of a superior quality of glass, double and single strength, ranging from the smallest sizes to dimensions of 40x76 inches. The individual members of the firm are J. S. Stewart, Harrison Estep, J. L. Jourdan, James Collins, Lawrence Walker, Charles Kirchenbower and G. W. Norcross, all well-known gentlemen in connection with the great staple industry in which they are so successfully engaged. Besides the manufacture of window glass the firm deals largely in druggists' glassware and apothecaries' furniture, in which they are prepared to offer special advantages to dealers and the trade. The demand for the product of this house is large and active, extending over the entire West, North and South-west, and annually increasing. Among the many Pittsburgh firms pursuing the same branch of industry no house occupies a more honorable position than that of Stewart, Estep & Co., and none surpass it in a liberal, prompt and reliable business policy to which with its excellent quality of product is owing the prosperity of the concern and the esteem with which it is regarded.

R. PATRICK & CO.—Bankers, No. 52 Fifth Av.

Among the private financial institutions of Pittsburgh, the well known house of R. Patrick & Co., is one of the oldest and most prominent. Established in 1849 by and under the style of Patrick & Friend, it assumed the existing title in 1855, Mr. Friend retiring from the firm during that year. Upon the demise of Mr. R. Patrick in 1872, the operations of the house were continued by W. W. Patrick, Esq. The business transacted is strictly confined to legitimate banking, loans, discounts, collections, exchanges and deposits, and the purchase and sale of commercial paper. For nearly a third of a century this house has pursued a uniformly prosperous course, with a fixed policy of honorable principles that no circumstances were permitted to effect, and at present, with a capital of \$240,000, the house is considered as on a par with the best of its compeers. As one of the solid institutions of the Iron City, this banking house is well entitled to the confidence inspired by a career of untarnished success.

JOHN C. BRAGDON,—Wood Carver, 78 Fourth Av.

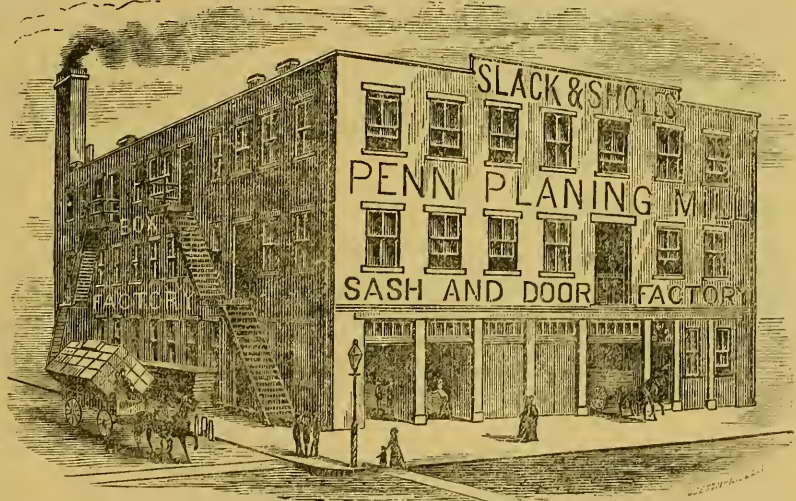
Among the numerous specialties in mechanic art that are fostered by the artisans of our city, that of fine wood carving in its special sphere is most extensively, if not exclusively, carried on by Mr. John C. Bragdon at the above location. Born in Allegheny city in May 1855, his natural inclinations toward the artistic led him to pursue a diligent course of practice under competent instructors, and he now fills a position most admirably the want of which was long felt in this community. In regard to the fine execution of those tasty designs peculiar to himself, it is safe to assert that his proficiency is not equalled by any cotemporary west of the mountains as evidenced by the trade he commands from the best classes of society and from builders in the line of architectural carving, for original, unique and fancy carving in articles of ornamentation, furniture, etc. At his apartments are also given lessons in this worthy and useful art, to a large class of ladies and gentlemen. This, heretofore, almost undeveloped field of industry cannot be too highly commended to the patronage of the citizens of the two cities.

E. D. WASSELL & BRO.—Scrap Iron, Steel and Metals, 33rd St. & A. V. R. R.

The handling of scrap iron, steel and other metals has become an important item of the trade and commerce of Pittsburgh, and several houses are largely interested in this branch of business. The firm of E. D. Wassell & Brother was founded in 1874 with comparatively small capital and moderate means, which have since that time increased to large proportions. Their office and yards are located at the corner of 33rd street and the Allegheny Valley Railroad and cover a large area, one being 20x100 feet, one 72x120 feet, and a third 55x120 feet, on which are large quantities of scrap iron, steel and other metals, averaging in value about \$10,000. The amount of their annual transactions ranges from \$40,000 to \$60,000. They procure their supplies from all parts of the United States, the demand being principally among the rolling mills and manufactories of Pittsburgh. They have two eight-ton sets of shears for cutting scrap and employ a large number of teams and men about their premises, which are conveniently and eligibly located with a side track from the Allegheny Valley Railroad running through their yards. Both members of the firm are active, energetic and reliable business men, thoroughly conversant with the peculiarities and requirements of the business in which they are engaged. Mr. E. D. Wassell is a native of England, born in 1836. He has resided in the United States since 1844 and for the past twenty-five years has been identified with the industrial interests of Pittsburgh. Previous to engaging in his present line of business he filled the responsible position of business manager for several of the largest rolling mills in various portions of the United States, including the Superior Iron Works, the Brady's Bend Works and the N. Allen Iron Works. Mr. William Wassell is also a native of England, born in 1838. He came to this country at the age of six years, is a practical roller and iron worker of many years experience, and has been employed in many of the principal iron works of Pittsburgh. Previous to the formation of the partnership with his brother he worked at his trade in the mills of Wm. Clark & Co., the Superior Iron Works, the Union Iron Works and other establishments of a similar description in Pittsburgh. The brothers are gentlemen of high character and standing in the community and are public-spirited and enterprising business men.

PENN PLANING MILL,—Slack & Sholes, Penn Av. and Third St.

The firm of Slack & Sholes, proprietors of the well known "Penn Planing Mills," do an extensive business as Steamboat Joiners and builders and manufacturers of Boxes and every description of Flooring, Weather Boarding, Sash, Doors, Frames, Mouldings, &c. They carry constantly in stock, or are prepared to manufacture to order Laths and Shingles in any quantity, and do every description of Scroll Sawing at short notice. This house was founded by the present proprietors in 1853, with little or no capital, but by economy and judicious management, the business has grown steadily until to-day its capital invested is not less than \$40,000, and their annual business now exceeds \$50,000. Their average stock amounts to about \$10,000, and the building occupied by them is a three-story structure, 60x110, besides ample yard room. Their business is conducted in three separate departments, in which thirty hands are constantly employed, with a pay-roll aggregating over \$300 per week. Among the machinery used, we may mention two planing machines, one flooring machine, five moulding machines, one re-sawing machine, nine circular saws and other smaller machines, all of the most approved patterns and designs required for the various specialties of their business, the motive power for which is supplied by one forty-five horse power engine and two large boilers. As steamboat builders and joiners this firm has a wide spread and enviable reputation. They are prepared to construct every portion of a steamboat, with the exception of the iron work, in the most perfect and reliable manner. The wood work on many of the finest steamers on our river here has been done by this firm, and the elegant cabins of some of our palatial passenger boats attest their skill and ability in this direction. They have recently completed a number of extensive contracts for large South American companies, which have given the most perfect satisfaction, and they are negotiating with parties in that section for constructing several other steamers for use in South American waters. They manufacture all the portions pertaining to their line in this city, and ship in sections to its place of destination, sending their own workmen there to put it together. A representative from this house is at present in South America, supervising the completion of a boat for which they contracted some time since. The boats they have constructed and are now building, are for service on the Magdalena River, a navigable stream about 700 miles in length, portions of which are very shallow, and admit the passage of only light draught boats. The companies owning these lines in South America had previously had steamers built in Glasgow, Scotland, which proved to be failures, as they drew three and a half feet of water. The Pittsburgh built boats only draw twenty-two inches, and are specially adapted for use on this stream. They have given the most unbounded satisfaction in every respect. A model or drawing of the style of boats required was sent to this country, and with the energy and enterprise characteristic of Pittsburgh's manufacturers, the contracts were secured to this city. The house of Slack & Sholes is to be congratulated upon the success which has crowned their efforts in this particular branch of industry, as well as in the planing mill, which is one of the most complete establishments of its kind in the West. Both members of the firm are energetic, representative business men of the great manufacturing city of Pittsburgh. Mr. Slack has for many years been prominently identified with State, county and municipal affairs. He is a resident of Allegheny City, and has represented his ward for thirteen years in the City council, and for most of that period occupied the responsible position of President of the select council. From 1861 to 1865 he was a member of the State Legislature, and his record in that body was not only highly creditable to himself, but eminently satisfactory to his constituents.



JOHN GRAY & CO.—Dry Goods, Notions, &c., 1316 Carson St., South Side.

The popular dry goods establishment of the enterprising and driving firm of John Gray & Co., at 1316 Carson St., South Side or Birmingham portion of this city, ranks among the leading establishments of the kind in the entire city, and is worth liberal mention in this work. No house in any part of the city offers greater inducements to the purchaser than this, and no establishment at least in that part of the city is more widely known or enjoys a finer trade. The popularity of the firm is due to the liberal policy and prompt business habits of the proprietors and the cordial manner in which every one visiting their rooms is treated by themselves and their employees, as well as the general excellence of their stock and the complete and choice assortment that is at all times displayed, and the low and popular prices at which their goods are sold. The house was founded in 1865 by Samuel Grover, who was succeeded by the present firm composed of Jno. Gray and Henry Porter. The firm occupies a large and well appointed store room, divided and arranged in departments to facilitate the most orderly transaction of business. It is supplied with a carefully selected stock of about \$20,000 in value; six men are employed in the different departments of the store and the annual business reaches very large figures. John Gray is a native of Ireland, born in 1844, he came to this city in 1866, and since his connection with the business interests of the city has shown a spirit of enterprise that has achieved for himself and house an enviable position among the successful business men of the day. Henry Porter is an Englishman by birth, but has been in this country many years. He is a courteous gentleman of ability and energy.

WM. E. GRAY, —Dry Goods and Millinery, 1302 Carson St., South Side.

The south side portion of the city or Birmingham is one of the most prosperous districts in the entire city, and is the centre of a large and growing trade drawn to it from the wealthy country districts and outlying suburbs. It is noted for the many extensive iron mills and glass factories within its limits which contribute to its prosperity—of course there are many fine business firms engaged in the various branches, some of them metropolitan in their character. Among the number and occupying a leading position in the dry goods business is the well known and popular house of Wm. E. Gray, 1302 Carson street. This house was founded by W. H. Wakefield, who sold it out to its present proprietor in 1873, since then under the able, energetic management of this very popular and courteous gentleman it has had a prosperous career and its trade has been increasing rapidly. He is now doing a business of \$40,000 or \$50,000 per annum and carrying a stock never worth less than \$20,000. He occupies a large three-story building 24 feet front by 65 feet deep, divided into five departments, of these the first is devoted to dry goods, the second to domestic, the third to carpets, the fourth to millinery and the fifth to notions, etc. Five clerks and salesmen are constantly employed in supplying Mr. Gray's large and growing trade. Perhaps no establishment in any part of the city offers any advantages to the purchaser superior to those offered by this store, which ranks among the leading houses in the entire city and is deserving of more than passing notice in a work devoted to the business and industries of the smoky city. Mr. Gray was born in Ireland in 1846 and came to this city in 1870. His life has been spent in business pursuits, and he combines the highest characteristics of the Irish race, together with their well known frank, genial and generous qualities.

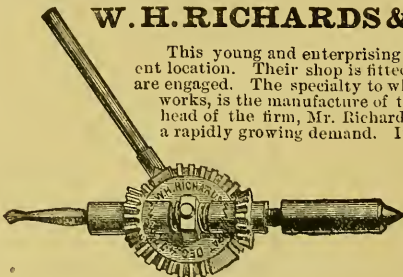
JOHN A. STAFF, —Groceries and Provisions, 439 Carson St.

This name has long been familiar to home and table of a large number of the citizens of the Smoky City, and is certainly entitled to most creditable mention among the leading grocery and provision houses of the city of Pittsburgh. Mr. John Staff was born in Germany in 1819, and came to this city in 1845, where he soon became identified with the general business and activities associated with its growth and development. It was not until 1866, however, that he engaged in his present business, in his store at No. 439 Carson St., where he now occupies a brick building 24x60 feet in size, which he has amply stocked with first-class Groceries and Provisions, choice family Flour—the best in the market—fine Teas, Coffees, Sugars, Syrups, Canned Goods, Tobacco, Cigars, Notions, and hundreds of other articles for household use. Since the commencement of business he has enjoyed a good trade, which has greatly increased, and which gives promise of becoming one of the most flourishing and important establishments of the kind in the city. The creditable character and standing of himself and family have made the store deservedly popular with the best class of trade in the city.

T. H. WHITE, —Groceries & Produce, 92 Webster Av.

This business was established by Mr. White in 1859 with a moderate capital, which has since then been greatly increased. He carries a stock of about \$2,500 and transacts an annual business of between \$8,000 and \$10,000, and occupies the building 20x45 feet in size, at 92 Webster avenue, in front of his residence, which he has well stocked with the best and freshest goods, embracing best teas, coffees, sugars, syrups, canned goods, fruits in their season, etc. His excellent management and long experience in the business is met upon the part of the public with a very liberal patronage. Mr. White was born in Ireland in 1819 and came to this city in 1856.

W. H. RICHARDS & CO. —Turners and Machinists, cor. 32d St. & Penn Av.



This young and enterprising firm was organized April 1, 1879, and began business at their present location. Their shop is fitted with machinery especially adapted to the interests in which they are engaged. The specialty to which this firm devotes its attention, and its object in opening these works, is the manufacture of the "Double Motion Ratchet Drill," an invention of the ingenious head of the firm, Mr. Richards. It is an invention of recent date, of great utility, and is finding a rapidly growing demand. It is so constructed that a continuous rotary motion of drill is obtained by the simple oscillatory motion of the lever back and forth. It is a valuable invention, and, as soon as its merits become known, will undoubtedly entirely displace the old-style drill. The invention commends itself on sight to every mechanic, blacksmith, plumber, or whoever has occasion to use an iron drill. The firm is now kept busy making Drills, and their shop is tested to its full capacity to supply the demand. They are also prepared to do machinist work of every description, Mr. Richards being a thoroughly practical and skilled mechanic. These enterprising gentlemen have founded an industry that will, at no distant day, give

them high rank among the successful institutions of the Smoky City. Mr. Richards was born in England in 1848, and came to the United States in 1870. He learned the trade of roll turner, at which he worked a number of years, until, having completed his invention of the Drill, he associated with him Mr. Nichols, and engaged in his present enterprise. Mr. Nichols is a native of Pittsburgh, a gentleman of large business experience, and well and favorably known throughout the entire city.

WILLIAM KERR,—Carpenter & Builder, 189 Webster Av.

Mr. Kerr is the successor of Booth Brothers, who carried on this business here about 35 years ago. Taking the control in 1865 with limited capital, and being a skilled workman, he soon found ample employment for himself and several hands, and his business increased each year, until now he employs on an average ten men and in very busy times more. During the general building season his stock of building materials will run from \$30,000 to \$40,000 and his facilities for promptly executing any contracts he enters into are unsurpassed by any contractor or builder in the city. Mr. Kerr has had many years experience and is himself one of the best skilled workmen to be found in this city, besides being a gentleman of excellent judgment. Those requiring his services will find him accurate in his estimates and prompt and faithful in the execution of his work. He has had the control of many of the most important buildings, and never fails to render satisfaction to those who employ him. His annual business transactions will usually run from \$38,000 to \$40,000; his headquarters are at 189 Webster avenue, where he occupies a two-story building 26x50 feet in size, with yard room 100 feet square. His thorough and comprehensive knowledge of this business in all its details makes him extremely popular with the public, especially so in his execution of fine interior work. He is prepared to take contracts for all kinds of buildings and execute job work in the best manner to order. Mr. William Kerr was born in Ireland in 1835, and came to this city in 1851. He has always taken a deep interest in the city's welfare and prosperity as well as exercising a strong political influence in his section of the smoky city, and has several times filled the office of councilman with credit and satisfaction to his constituents.

R. H. PALMER & CO., Limited.—Hats, Caps, Furs & Straw Goods, 77 Wood St.

For nearly forty years the name of Mr. R. H. Palmer has been identified not only with the hat and cap trade of Pittsburgh, but with various enterprises and institutions of the Smoky City. The house of R. H. Palmer, of whom the present firm are successors, was established about forty years ago by Mr. Palmer, on Market street, as dealer in ladies' straw goods, &c. About twenty-five years ago he removed to Wood street, adding a full and general line of hats and caps. The present firm, which consists of Mr. R. H. Palmer, Mr. A. Swen and Mr. W. J. Moreland, was founded in February, 1876, under the firm style of R. H. Palmer & Co., Limited. They occupy the entire three-story building at No. 77 Wood street, with a fine line of Hats, Caps, Furs and Straw Goods, employing five assistants in the store, and two traveling salesmen, who represent the interests of the house throughout Pennsylvania, Ohio and West Virginia, where their trade is at present principally located. With the facilities enjoyed by this house there seems to be no valid reason why their trade in the future should not considerably increase. Mr. R. H. Palmer is a native of New Hampshire, but has resided in Pittsburgh a great portion of his life. During the palmy days of the old "Pittsburgh Commercial" Mr. Palmer was one of the principal stockholders and treasurer, and much of the success of that newspaper is owing to the vigor infused into it by his influence. He is now one of the directors of the Monongahela Insurance Company, and has held several positions of prominence in the city. Mr. Swen is a young man of ability, and has for twenty years held a position in this house as bookkeeper and financial manager. He is a native of Westmoreland County, in this State. Mr. W. J. Moreland was born in Ireland, but has for many years been actively engaged in this line of business. The house is a representative one in the hat and cap trade, and stands deservedly high in the mercantile community.

JAMES DUNCAN,—Family Groceries, Cor. Fulton & Franklin Sts.

Mr. James Duncan, dealer in choice family Groceries and Provisions, corner of Fulton and Franklin streets, occupies an excellent room in a two-story brick structure 21x50 feet in size, which he has fully stocked with everything in this line suited to household and table use, making a specialty of fine teas. This business was originally started by Mr. Stevenson in 1849, and after one more change in the proprietors it came into the hands of the present proprietor in April 1879. The facilities of Mr. Duncan are not surpassed by any house in the city for first-class goods and lowest prices, and families can have goods delivered without extra charge right to their door, no matter what part of the city they reside in. Mr. Duncan was born in Ireland in 1842 and came to this city in 1869, since which time he has been actively engaged and entering into business on Fifth avenue first in 1876, until engaging in his present promising trade at the corner of Fulton and Franklin streets, in April, 1879.

GALLAGHER & HOUSE,—Boots and Shoes, 198 Fifth Av.

There is no branch of business which requires a higher degree of enterprise and business capacity than the boot and shoe trade, and in this connection we notice the excellent establishment of Messrs. Gallagher & House, whose fashionable boot and shoe store is located at 198 Fifth avenue, corner of High street. They occupy a room 25x40 feet in size in a three-story brick building, where they keep a choice and most desirable stock of boots and shoes for men, women, boys, misses or children. They also have in connection a custom department in which they employ first-class workmen and warrant good stock, good work and neat fits. They also do repairing promptly to order. In their general stock they take special pains to secure the best class of Eastern and hand-made work, and at the same time that which is both stylish and serviceable. Since they have been in business they have already secured great public favor for the best stock of fashionable goods in this line. James W. Gallagher and John House, the individual members of this house, are both natives of this city, the former born in 1853 and the latter in 1842.

JOSEPH SELL,—Hats, Caps & Furnishing Goods, 1412 Carson St.

Among the many popular and handsome establishments engaged in the retail trade in Birmingham or South Side, the store of Joseph Sell is deserving of notice. Mr. Sell started business in his present location in 1878 with a small cash capital. His store building is a two-story brick 20x60 feet in size and stocked with a large and very desirable stock of hats, caps and furnishing goods of the best quality and latest styles, and which are sold at lowest figures. Mr. Sell is carrying from \$3,000 to \$4,000 worth of stock, and is doing a very comfortable business, and all who visit his store are most courteously treated whether they purchase or not. Mr. Sell was born in Allegheny county in 1844 and is well known in the community. He is an industrious and energetic merchant, a social and genial companion and an upright honorable gentleman.

M. & R. WALSH,—Grocers, &c., Carson St., near Bridge.

This old and established house, besides dealing extensively in Groceries, both wholesale and retail, are jobbers in Iron, Glass, and Pittsburgh manufactured articles, and dealers in foreign and domestic Fruits and country produce generally. The house has been in operation over 30 years. Its present prosperous and enviable position shows what energy and industry may accomplish from a comparatively small capital at the beginning. They now occupy the second floor of a building 32x60 feet in size, and carry a stock of general Groceries estimated at \$10,000, and transact a business of about \$19,000 annually. They also have large real estate transactions. Mr. M. Walsh was born in 1830, and Mr. R. Walsh in 1835.

S. F. WADSWORTH, —Dealer in Coal, 202 Beaver Av.

The industries which characterize our prominent manufacturing cities are indebted to a great degree to what is known as "the black diamond," hence it is but just, in the compilation of historical facts and figures relating to the leading business houses, manufacturing and industrial pursuits of the cities of Pittsburgh and Allegheny, that we give due importance to that branch of trade, which stands as the "power behind the throne"—the general coal trade. In this connection we refer to the business of Mr. S. F. Wadsworth, dealer in Monongahela and Saw Mill Run coal, nut coal and slack, whose office and yards are located at 202 Beaver avenue, foot of Locust street, being in the Sixth Ward of Allegheny city. Mr. Wadsworth commenced the coal trade here in 1876, always keeping a good supply on hand and is doing a business of about \$6,000 per annum. This business has been conducted by Mr. Wadsworth with marked ability and to the entire satisfaction of his trade which continues to increase year after year. We should not fail to state that he never permits his stock of coal to run down, and can fill orders by mail or otherwise on very short notice. It is needless to commend the quality of coal handled by Mr. Wadsworth, because it is known and recognized as of excellent quality. This gentleman is a native of this city, born in 1857, and has now entered upon a business career with most flattering prospects.

W. HELBLING, —Butcher, Butler St., bet. 48th & 49th Sts.

For the past ten years the enterprising and popular gentleman, Mr. Wm. Helbling, has carried on the butchering business at his present location on Butler street, between 48th and 49th streets. Prior to locating here he had been for many years engaged in the same line in the Diamond Market. He has one of the finest markets to be found in the East End, and in all its appointments it is a perfect model of neatness and cleanliness. He has at all times a fine stock of choicest meats of all descriptions, and dressed in the most artistic manner, and, of course, does a large business. Mr. Helbling never offers an inferior article to his customers, and his prices are at all times as low as at any other establishment in the city. He was born in Lawrenceville (now Pittsburgh) in 1841. His father was engaged in the butchering business, and the son was raised to it from early life, and has since successfully devoted his attention thereto. Although yet a young man he has accumulated a handsome property, and is an enterprising and honorable business man.

THOMPSON BELL & CO.—Bankers, No. 59 Fourth Av.

One of the oldest private banking houses in Pittsburgh, that of Mr. Thompson Bell, was established nearly a third of a century since, and from the period of its inception to the present date has always been conducted upon a conservative policy that insured at all times a solid, solvent and satisfactory condition. Mr. Bell is a native of Pittsburgh, and has had a widely-extended experience in fiduciary affairs, having been first cashier of the Pittsburgh Safety Fund Co., which afterwards became the Farmers' Deposit Bank. He has been connected with many important public enterprises and private trusts, and in many ways has largely conducted to the general welfare of the community. The cashier of this bank, Mr. J. M. Bell, is also a native of Pittsburgh, and for many years has occupied his present position, acquiring the distinction of thoroughly understanding his business. Conducting a general banking business in Loans, Discounts, Collections, Exchange and Deposits, the Bank of Thompson Bell & Co. is cordially commended as being altogether liberal and honorable in dealing, as well as entirely reliable in every respect.

MARINE NATIONAL BANK,—Cor. 3rd Av. & Smithfield St.

Organized as the Commercial Banking Company in 1870, this house became a National Bank five years later under the original management which still obtains. Established during a very unfortunate epoch, its whole course lying through the great financial Sahara of American history, this institution has notwithstanding enjoyed a prosperous career, and entirely unshaken has achieved a position among its cotemporaries which is the best commentary upon the manner of its management, which in the face of general disaster could secure success. Among its officers and directors will be found many names prominent in the commercial world and closely identified with the best interests of the community. They are as follows:—Wm. H. Everson, Esq., President; B. F. Wilson, Esq., Vice President; Mr. W. C. Macrum, Cashier; Mr. O. F. Wharton, Teller; Mr. George S. Macrum, Collection Clerk. The Directors while including the President and Vice President are:—Messrs. J. B. Sneathen, Jacob Klee, Wm. France, D. W. C. Bidwell, Jno. O. Phillips, Jno. L. Lewis, H. B. Hays, Andrew Fulton, E. A. Montooth, Esq., and J. C. Risher. With a capital of \$200,000 and transacting a general banking business in loans, discounts, collections, exchanges and deposits, the Marine National Bank is regarded as a favorite institution and inspires universal confidence.

F. R. FLECK, —Druggist, 171 Beaver Av., Allegheny.

The old established and well known Pharmacy, located at No. 171 Beaver avenue, was purchased by the present proprietor in 1875, and since that time has been successfully conducted by him and the trade has steadily increased. He occupies a neat and attractive store in the three-story brick building at the number named, with a frontage of 20 feet and extending back 55 feet, where he keeps on hand a choice stock of pure drugs and medicines, perfumeries, fancy goods, toilet articles and everything pertaining to a well regulated establishment of this kind. Mr. Fleck is an experienced pharmacist and pays especial attention to compounding physician's prescriptions in a careful and accurate manner, using only the very purest and best ingredients. His trade, which will amount to about \$6,000 per annum, enjoys the most unbounded confidence of the leading physicians of the city, and his prescription business is quite an important item. He carries a stock of about \$5,000 and employs one competent and experienced assistant. Mr. Fleck was born in Indiana county, Penn'a, in 1847, and has resided in Allegheny since 1875.

ENTERPRISE PLANING MILL,—Hahn, Harms & Schramm.

Cor. 17th and Jane Sts., S. S.

The Enterprise Planing Mill is one of the most complete and extensive establishments of its kind in the two cities. The original capital invested in the business by the present proprietors was \$20,000, which has since been increased nearly one hundred per cent. The mill and yards, located at the corner of Seventeenth and Jane streets, South Side, cover an area of 100x120 feet. The mill covers a space 52x100 feet, and is supplied with all the requisite machinery of the most approved patterns and designs, and a 35 horse power engine, with a boiler 24 feet in length by 40 inches in diameter. The firm manufactures here every description of Flooring, Weather Boarding, Sash, Doors, Mouldings, Boxes, &c. Stair Building, Scroll Sawing and Wood Carving are specialties. The firm are also extensive contractors and builders, and some of the finest public and private buildings in the city have been constructed by them. They carry on hand an average stock of about \$7,000, consisting of lumber in the rough and finished work pertaining to their line. Seventeen skilled workmen are constantly employed, at a weekly expense of about \$220. The annual trade of this house aggregates \$35,000 to \$40,000. Messrs. Hahn and Harms are both natives of Germany. The former was born in 1837, and the latter in 1842. Mr. Hahn came to this city in 1844, where he has since resided. Mr. Harms has been in Pittsburgh since 1865. Mr. Schramm was born in Beaver County, in 1841, and has resided in Pittsburgh for the past twenty-two years. They are all energetic and reliable business men, practically conversant with all the details of the business.

WINTERTON ALE & BEER BREWERY,

Z. Wainwright & Co., Thirty-Sixth and Charlotte Streets.

The rapidly increasing popularity of the amber-hued beverage of the "Faderland" among all classes and all nationalities, and the immense sales of Lager Beer by manufacturers from other cities and States of late years to dealers in this section, have been the immediate causes of a determination upon the part of our home brewers to commence the manufacture of this healthful and nutritious article. Consequently in that spirit of emulation and enterprise which brooks no rivalry from abroad so characteristic of Pittsburgh's great manufacturers in every branch of industry, many of the brewers who formerly confined their operations to the production of ale and porter, have recently made extensive additions and improvements with a view to producing an article of Lager Beer of a quality equal to, if not superior to that of any establishment in the country. The old-established and well-known Winterton Brewery of the Messrs. Wainwright was among the first to enter the field in this line, and they have recently put upon the market a beer which has received the most enthusiastic encomiums of connoisseurs and been pronounced by competent judges and by retailers to be superior to any yet offered in this market. The Ale and Porter previously manufactured by this firm had acquired a national reputation, and the indications are that the Lager Beer of Wainwright will, as soon as its merits become known abroad, attain a like enviable celebrity. The Winterton Brewery, by many years the oldest in this section, dates back its origin to 1818, and for over sixty years its proprietorship has been vested in the Wainwright family. Mr. Joseph Wainwright, the founder of this extensive house, was a native of Yorkshire, England. He came to the United States in 1808, and to Pittsburgh the same year, and purchased Wainwright's Island and nine acres of ground adjoining, being what is called a part of the "good liquor patent." Here he erected a woolen mill and afterwards a grist mill and oil mill, giving them the designation of the "Winterton Mills." Subsequently, in 1818, he embarked in the ale brewing business, manufacturing at first what was known as English Table Beer. Shortly afterwards he commenced brewing Ale of a superior quality, and continued that business with marked success until 1852, when he retired from active connection with the house and turned the business over to his two sons, Jarvis and Zachariah Wainwright. Mr. Jarvis Wainwright shortly after withdrew from the firm and removed to Zanesville, Ohio, and engaged in business there, his brother Zachariah continuing the management of the brewery here until 1860, at which time he associated with himself in the business his three nephews S. J., J. Z. and H. E. Wainwright. In 1865 he turned over his interest in the firm to his son, Mr. J. G. Wainwright, the style of the firm still being the same. In 1878 Mr. J. G. Wainwright retired and the present members of the firm are S. J., J. Z. and H. E. Wainwright, doing business under the old firm name and style. The brewery, which for many years was noted as the most complete and perfectly arranged establishment of its kind in the United States, and producing the best quality of ale, was continued exclusively as an ale brewery until 1879, when perceiving the growing demand for Lager Beer, the firm with their accustomed energy and enterprise resolved to produce an article that would surpass all other beers and supply the home demand with a superior quality and higher grade than is now furnished by the brewers of Western cities. Aided by careful observation and abundant capital, accumulated through their own enterprise and ability, they have made the necessary alterations and improvements and now possess the most complete and thoroughly appointed beer brewery in this country, with facilities for manufacturing Lager on an extensive scale and of a quality not to be surpassed by any in the world. The capacity of their extensive establishment is not less than fifty thousand barrels per annum. Their extensive buildings cover more than an acre of ground, and their malting house, brewery, ice-houses, cellars and vaults are perfect and complete in all their departments and details, and the pure and clear water used by them is peculiarly adapted to the manufacture of beer. The firm is to be congratulated upon securing the services of one of the most competent and skilled brewers as general supervisor of the brewing department, and their entire corps of assistants are men of experience and thoroughly conversant with the business. The members of the firm are both gentlemen of long practical experience, and possess a thorough knowledge of the business in which they have grown up from childhood, and give their personal attention to its management. They are liberal-minded, public-spirited gentlemen, intimately identified with the business interests of the city and particularly with the material welfare and prosperity of that section in which their immense establishment is located. Mr. S. J. Wainwright was born in Pittsburgh in 1829 and during a busy and active lifetime has been prominently connected with and interested in all public improvements and movements tending to develop and benefit the city of his birth. He has ever taken an active and prominent part in municipal, county, State and national politics, and as a leading member and enthusiastic worker in the great Republican party has been largely instrumental in securing numerous victories for his party and his friends. Mr. Wainwright was a member of the old Borough Council previous to the consolidation of Lawrenceville with the city proper, and as a member of the Select Council of Pittsburgh he distinguished himself for ability and devotion to the interests of his constituents and of the entire municipality. In 1873 and 1874 he represented his district at Harrisburgh in the House of Representatives with marked ability, and left an honorable record as one of the most upright and conscientious members of that body. He was a member of the National Republican Convention at Cincinnati which nominated President Hayes, and was selected as delegate by Judge Sterrett in his interests at the State Convention one year ago. He is also president of the Arsenal Bank. In all the varied walks of life, in his social and private intercourse, in his commercial career, in the mercantile community, in every department of public life in which he has been called upon to serve, he has been uniformly noted for courtesy, urbanity and unimpeachable integrity, and we greatly mistake the sentiment of the community if higher political honors are not yet in store for this accomplished, public-spirited gentleman. Mr. J. Z. Wainwright was also born in the Smoky City in 1832, and, like his brother, has been actively engaged in business since he was a young man and taken a deep interest in the growth and prosperity of the city. Mr. H. E. Wainwright was born in 1835. He stands very high in the estimation of his neighbors and acquaintances. He now represents his ward in the City Council to the unqualified satisfaction of his constituents. Few business houses in this country can boast so long and honorable a business career as the one now represented by the three gentlemen who form the subject of the present brief and imperfect sketch, and few houses in any branch of business have attained so wide-spread and enviable a notoriety for the uniform excellence and superiority of their goods during a continuous career of over sixty years. To such men as have managed and controlled the business of this house during that long period is Pittsburgh indebted for the proud position she holds to-day as the great industrial metropolis of the Western Hemisphere.

ERNST AXTHELM,—No. 103 Third Av.

Agent for Aetna Sewing Machines, and Electro and Mechanical Bell Hanger.

Mr. Axthelm is a practical and scientific mechanic, and makes a specialty of Electro and Mechanical Bell hanging and repairing sewing machines and every description of small machinery. He has had twenty-one years experience. He has been resident agent for the celebrated Aetna Sewing Machines since 1861. He makes a specialty of light mechanical appliances and repairing, having the most extensive establishment of its kind in the city. Mr. Axthelm was born in Germany in 1826, and came to this city in 1851, where he has since resided.

A. J. THOMAS,—Contractor and Builder, 33 Fulton St.

Mr. Thomas was formerly of Allegheny City, but removed to his present place, where he is prepared to take contracts for carpenter and joiner work and do general job work promptly and in the best manner. He employs none but practical and experienced hands and the work in all cases is guaranteed to give satisfaction. Mr. Thompson is a skilled mechanic and understands what he proposes to do. He always has at his command a supply of lumber and materials to meet the demand of his customers and those who may require his services. Those having work in this line will do well to secure his services.

EDGAR THOMSON STEEL CO., LIMITED.—*Steel Rails,* *Office, 48 Fifth Av.*

As occupying a prominent position among the iron and steel manufacturers of the United States, and more particularly important with reference to the industries of this community, the Edgar Thomson Steel Co., Limited, is entitled to more than passing attention in a work whose object it is to display fully and in detail the resources and advantages of Pittsburgh as a commercial and manufacturing center. Named after the late President of the Pa. Rail Road Company, the Edgar Thomson Steel Co., Limited, was organized Nov. 1, 1874, under act of the Assembly of Pennsylvania approved June 2, 1874, with a capital of \$1,000,000, increased Oct. 1, 1878, to \$1,250,000. The works were erected, and active operations commenced Sept. 1, 1875. These works, both in extent and productive capacity in the manufacture of Bessemer Steel Rails, Blooms, Billets and large forgings of special designs, are regarded as the most complete and convenient in every appointment in the United States. Located 11 miles East of the city on the P. R. R. and the line of the B. & O. R. R. Co., as well as fronting the Monongahela River, possessing all the advantages conferred by water navigation, connecting it with all points, West, North, and Southwest, and the benefits derived from proximity to the two most important trunk lines of road in the country, the plant with reference to cheapness and facility of transportation of product or materials is considered unapproached. At this site (Bessemer Station) the company own 106 acres, more than 20 acres of which are covered by the works, at the present time three blast furnaces being in process of erection.

The subdivisions of the works are arranged as follows, the number of employees being given in each department: rolling mills, 360 hands, converting department, 275 men, engines and boilers, 83 men, maintenance and general labor, 247 men, superintendence and clerical force, 23 men, in all 988 operatives, requiring a disbursement of about \$45,000 monthly. All the machinery in use at these works is noted for its perfection and scientific fitness for the various purposes for which it was specially designed and adapted. The Bessemer process is applied in its greatest perfection, an added advantage being gained by the use of W. R. Jones' patent compression process (to which the company have an exclusive right), and by which, through the operation of steam pressure upon molten steel, a uniformity, solidity, texture, and textile strength are secured, as well as freedom from flaws and atmospheric porosity, that gives to metal so treated the highest value for special constructive purposes. The present officers of the Edgar Thomson Steel Co., Limited, are ranked, outside of their connection with this concern, as among the ablest in the community, and are as follows:

Thomas M. Carnegie, Esq., Chairman, also Treasurer of the Keystone Bridge Co., and of Carnegie Bros. & Co. and Lucy Furnace Co.; Wm. P. Shinn, Esq., Sect'y, Treas. and General Manager, also Pres't of the Ashtabula & Pittsburgh R. R. Co.; Wm. R. Jones, Gen'l Supt.; John Binard, Supt' converting works, and Thomas H. Lapsley, Supt' of rail mill. Among the special products to which the company is giving particular attention may be mentioned Steel for Bridges and architectural structures, requiring great strength yet lightness of appearance. As an evidence of the success attendant upon their efforts in this direction may be cited the bridge of the Chicago and Alton R. R. Co. over the Missouri River at Glasgow.

The product of the works, so far as Billets are concerned, is mainly monopolized in Pittsburgh, but the Bessemer Steel Rails, for the excellence of which the company has achieved a surpassing reputation, find buyers in all the principal railroads of this country. It is not the purpose to enter into a minute description of so considerable an enterprise in this volume. The design is accomplished if some idea of the magnitude, resources and product is conveyed to the mind of the reader, and some record made of the vast influence exercised for usefulness, and the general well-being on the part of the Edgar Thomson Steel Co., Limited.

MERCHANTS & MANUFACTURERS NATIONAL BANK, *61 Fourth Av.*

Perhaps no fiduciary institution in Pittsburgh is more intimately connected with the interests of the community or has had a career uniformly more prosperous or useful. Established in 1833 as a State Bank with a capital stock of \$600,000, in 1864 a stock dividend was declared and the capital increased to \$800,000, and the bank organized under the National Bank Act. Among the officers and directors at the present time will be found many names closely identified with the industries of Pittsburgh and her manufacturing resources. Mr. Wm. Rea of the well known Iron firm of Robinson, Rea & Co., is the chief executive officer of the bank, and Mr. Wilson A. Shaw occupies the position of cashier. The directors are as follows:—Mr. D. A. Stewart, of the Columbia Oil Co. and Pittsburgh Locomotive & Car Works; Wm. Miller, Esq., proprietor of Duquesne Forge and president of the Pittsburgh Exposition Society, &c.; Mr. Wilson Cunningham of the firm of Cunningham & Co., Glass Manufacturers; John Scott, Esq., president Allegheny Valley R. R., Pittsburgh Va. & Charleston R. R. and largely connected with the manufacturing interests of the city; Stewart McKee, Esq., of the firm of McKee Bros., Glass Manufacturers, and associated with other public enterprises; Wm. Stewart, Esq., of the Penn'a Co. as general freight agent, Henry B. Hays, Esq., senior of the firm of H. B. Hays & Bro., coal producers and operators; and Henry Lloyd, Jr., of H. Lloyd, Son & Co., Kensington Iron Works. With such a management it is not difficult to understand the secret of the success of the bank, a success pretty thoroughly demonstrated by a surplus of \$200,000. The staff of assistants are Messrs. Geo. Shaw, Teller; W. H. Jack, ass't Teller; W. E. von Bonnhorst, general book-keeper; G. L. Rodgers, individual book-keeper, Thomas B. Rea, discount clerk; and R. C. Young, messenger; W. J. Ward, watchman; Wm. Hamilton, janitor. The structure occupied by the bank was erected expressly for and by it, is one of the handsomest edifices in the city, both architecturally and with reference to the interior appointments and conveniences which are exceptionally attractive and substantial. In conclusion it is safe to assert that no financial institution in Pittsburgh occupies a higher place in the consideration of the community than the Merchants & Manufacturers National Bank.

OTTO KREBS,—*Lithographer, No. 6 Sixth Av.*

By far the most important house in Pittsburgh engaged in the Lithographic business is that of Mr. Otto Krebs, not only on account of the magnitude of the business transacted, but because of the really artistic and superior work which emanates from his establishment. The house was originally founded in 1854 as Krebs & Bro., changing to present style in 1861, since which time the trade has been successfully conducted with a constantly increasing demand upon its facilities. When Messrs. Krebs & Bro. first established the business a quarter of a century ago, theirs was the only enterprise of the kind in Pittsburgh, if not in the West, and the introduction and development of the art is mainly owing to their skill and resolution. The spacious establishment now occupied by Mr. Krebs on Sixth avenue is in marked contrast with the little apartments where the firm first began operations. The premises at present consist of one large brick building, three floors of which, 30x75 feet each, are devoted to the business. Here are employed twenty expert artisans, to pay whom a weekly outlay is required of about \$200. Six presses of various sizes, from the smallest to the largest made, form part of the machinery used, besides one steam engine and boiler and other apparatus and appliances, the best and most ingenious that capital or invention could supply. The business employs one traveling salesman and extends through Pennsylvania, Ohio and the Western States. Everything in the way of lithographing is executed in this establishment with rapidity and superior excellence, and the facilities for such work are not excelled by any house in the country. Mr. Krebs is of German origin, since 1852 he has been a resident of this city and has done much, not only to perfect his art, but to encourage and foster the general industries of the community. To those who desire work of this description Mr. Krebs is cordially commended as having not only the facilities, but the experience to render perfect satisfaction in every case.

PEOPLES NATIONAL BANK,—No. 79 Wood St.

Among the most successful financial institutions in Pittsburgh the Peoples National Bank must be accorded an honorable place, not only from the success attendant upon a useful career, but from the extent of its operations and capital. This bank was organized in 1865 with a capital of \$1,000,000 and a corps of officers in which but little change has been since made and who are at present as follows:—Barclay Preston, Esq., President, of the firm of Davis, Chambers & Co., White Lead Manufacturers; J. W. Chalfant, Esq., Vice President, of the house of Spang, Chalfant & Co., and Isabella Furnace Co., and F. M. Gordon, Esq., Cashier since the establishment of the institution, who is assisted by Messrs. W. H. Riddle, Teller; J. F. J. Allison, General Book-keeper; B. F. Thomas, Individual Book-keeper, and G. M. Murphy, Assistant Teller. Some idea can be gained of the success achieved by the management from the facts that since its establishment over one million dollars have been paid in dividends, and that the surplus now on hand amounts to \$180,000, with an average line of deposits to about \$600,000. With such a history and influence, the Peoples National Bank has become synonymous with solvency and prosperity, and is justly entitled to the consideration it has acquired.

SECOND AVENUE COACH LINE,—James F. Fawcett, Superintendent.

In a work of this nature, embodying the industries of the Iron city, its business facilities and prominent features of general information to the public which shall elicit present and future interest, it is very proper and will be expected that the various railroad lines centering here and the facilities for reaching various portions of the city and suburbs, be clearly set forth. We, therefore, take pleasure in giving the readers of this work a brief description of this important route under the able management and superintendence of Messrs. Geo. W. and James F. Fawcett, brothers. The route extends from Market street to Glenwood, a distance of five and three-fourth miles. The origin of this line of transit and freight over this route was a long-felt necessity, and the great inconvenience to which citizens along this route were subject from a lack of something of this nature which promised to meet the requirements, and as the result has proven, it has been so liberally patronized that additional coaches will be required, (four more new coaches now building.) The business was started by James F. Fawcett, Esq., in the early part of the present year, in company with George W. Fawcett, his brother. They now have five good, substantial and comfortable coaches, and with the four additional ones will make nine, making regular trips, and will shortly put on additional new ones. They have an investment already of about \$7,000 including stock and fixtures, employing thirty-three horses and ten men, with one stable and barn, two stories high and 30x100 feet in size, and one building for building and repairing coaches. They offer not only a pleasant mode of travel in their convenient and roomy coaches, but carry passengers and freight at such low rates that this line and its able managers have become decidedly popular and liberally patronized. Mr. James F. Fawcett was born in this city in 1854, and has all his life been identified with its growth and progress. He is the inventor of an improved axle box which is considered of much value. Mr. George Fawcett, Sr., was born in England, in 1811, and came to this city in 1833. These gentlemen are wide-awake and energetic citizens and have established a line of transit and freight travel which must continue to grow in importance from year to year.

T. P. BEDILION,—Jeweler, 53 Fifth Av., First National Bank Building.

Among the most prominent houses in the city engaged in the Jewelry business, the establishment of Mr. T. P. Bedilion is entitled to special mention, not only on account of its elegant appointments, but the admirable taste displayed in the selection of a very comprehensive stock of high class goods and rare articles pertaining to the trade. He carries the choicest line of Table Ware, including Dinner and Tea Sets, Water Sets, Epergnes Fruit Stands, Cake Baskets, Urns, Entree Dishes, besides Lavatory Sets, Jewel Cases, Candlesticks, Candelabras, goods suitable for bridal and other presents, and Watches, Diamonds, French Bronzes, Clocks and Ceramic Ware, etc. The premises are admirably located in the First National Bank building, on Fifth avenue, two floors being occupied, the departments embracing repairing, engraving, jobbing and retailing. The show and salesrooms in the latter division being on the first floor, with a repairing department, managed by thorough mechanics, for the repair of fine Watches, Clocks and setting of precious stones. Mr. Bedilion is originally from West Virginia, and for an extended period was engaged in the same business at Wheeling, removing to Pittsburgh and establishing his present enterprise in 1874. His standing and relations with the trade are such as to enable him to offer special advantages to buyers, particularly in the manufacture of ordered jewelry and the setting of diamonds. In every respect Mr. Bedilion is highly commended to the public.

JOHN BATES,—Stoves & House Furnishing Goods, 1403 Washington St., South Side.

Mr. Bates is a native of the South Side and was born in 1852. He commenced business for himself at his present location, No. 1403 Washington street, in 1876, with moderate means, but with an ample capital of perseverance, pluck and energy. He now has a flourishing and lucrative trade, and his capital has considerably increased. He occupies two buildings with a frontage of forty feet and a depth of twenty feet, and carries a full and complete stock of Cooking Parlor and Office Stoves, Grate Fronts, Ranges, Hollow Ware and House Furnishing Goods, in great variety, and manufactures every description of Tin, Copper and Sheet-Iron Ware, making a specialty of Job Work, Tin Roofing, Conductors, Gutters and Sheet-Iron Work for Mills. He carries an average stock of about three thousand dollars and enjoys a liberal patronage from both city and country.

JOHN K. COLLINS,—Cigar Factory No. 407, 219 Federal St., Allegheny.

The manufactory of John K. Collins, No. 407, is located on the west side of Federal street, a short distance above the parks. The business is carried on in a two-story frame house 20x60 feet in size. Mr. Collins was born in Clarington, Ohio, in 1855 and came to Allegheny and engaged in business in 1877. He manufactures and keeps constantly on hand a large and choice assortment of the best brands of cigars, smokers' supplies, etc., making a specialty in the finest and best grades of tobies to be found in Western Pennsylvania. His trade extends over Ohio and Pennsylvania. He has ten assistants employed.

J. PARKE WILSON, Agt.—Hardware, Cutlery, &c., 163 Penn'a Av., Allegheny.

Mr. Wilson was born in Allegheny in 1848 and was formerly in the hardware business at 151 Penn'a avenue, and in October 1875 removed to his present location. His place of business is situated on the east side of Penn'a avenue, a short distance below Bidwell street, in Frazier's block, formerly occupied by F. Menseideck. He keeps constantly on hand a choice assortment of hardware, cutlery and house furnishing goods of the best quality and is also agent for the celebrated granite iron ware. Parties desiring anything in this line will do well to call and examine the stock of Mr. Wilson.

ARMSTRONG & McKELVY,—*Mfrs. of White Lead & Colors, 37 Wood St.*

A brief inspection of the various branches of trade and manufacture of our city must convince any one that a decided reaction has set in, and that the manufacturing interests of this centre are rapidly improving, and are of such vitality and magnitude as to be felt through all the arteries of trade. It is the purpose of this work to aid in this development by disseminating such intelligence regarding the advantages possessed by our manufacturers here as will draw attention to their facilities. In connection with the manufacture of White Lead, the firm name of Armstrong & McKelvy at once associated itself in our mind with this line as being one of the most important and reliable houses. This firm was established about ten years since and has been uniformly successful, having established a national reputation for the "Keystone" brand of Lead, their trade extending from the most eastern part of the country to the Pacific Slope and shore. They pay close attention to the manufacturing department, having a large building fronting on the Allegheny river on the West Penn road, exclusively devoted to this specialty. It is named the Keystone White Lead Works, and has an annual capacity of two thousand tons of white Lead, five hundred tons red lead, litharge and orange mineral. All the machinery and appliances are of the latest and most improved form and especially intended for economy as well as excellence of production. The facilities for handling, packing, shipping, etc., are unsurpassed, they having their own side track helping materially to reduce the cost. This is a prime consideration in these times, when the balance sheet of any firm will show on the right side as much from reduction of expenses as from profits on sales. Mr. Armstrong has charge of the manufacturing department, and the excellence of these leads, etc., is sufficient evidence of his capacity and administrative ability. Mr. McKelvy has charge of the office and business department of the firm. This gentleman was one of the firm of McCully & Co., glass manufacturers, for a number of years and has had an excellent business education. Pittsburgh owes much of its business prosperity to such firms, who not only produce excellent wares, but are noted as well for their probity and honorable business dealings. We may say to our readers who deal in or use white leads or kindred goods, that in patronizing this firm they will consult their own best interests, as all their dealings as well as wares are of the highest order.

CHAUTAUQUA LAKE ICE CO.—*Twentieth and Railroad Sts.*

Among the various commercial and industrial pursuits of the city, the Ice trade is by no means one of the least extensive, and among the number of establishments engaged in that branch of business the Chautauqua Lake Ice Co. stands preeminently at the head. Any one visiting the city may be able to form some idea of the extent of the trade of this establishment from seeing in every street and in all parts of the city the numerous and beautiful white wagons of this company going to and fro delivering to the sweltering denizens of this Smoky City great chunks of their beautiful Ice, clear as crystal and full of suggesting comfort on a hot day. The Chautauqua Lake Ice Co. was organized in 1869 by a party of Pittsburgh gentlemen, and run by them until 1873, when the entire business came into possession of A. Hersperger & Son, the former having managed the affairs of the company from its organization. The Ice sold by this company—which is by far the finest, purest and most beautiful that is brought to the Pittsburgh market—is taken from Lake Chautauqua, one of the most picturesque sheets of water in the mountains of western New York. The company has erected immense Ice houses at Mayville, a beautiful village situated at the north-western end of the lake, and have at present 40,000 tons of Ice stored in them. During the warm weather this Ice is shipped to Pittsburgh daily in the cars of the A. V. R. R. Co. The company has unsurpassed facilities and the most approved machinery for cutting, packing, shipping and delivering Ice. Indeed, without all these, it could not supply its immense trade, which, during the Summer, requires from 200 to 500 tons of Ice per week. A. Hersperger is a native of Allegheny, and lived in the city until recently, when the growth of his business compelled him to remove to Mayville. A. A. Hersperger, the junior member of the firm, has the superintendence of its business in the city, and to this he devotes his entire energy and constant attention. The extended and growing trade of the company, the systematic, prompt and reliable manner in which this is supplied, speak volumes for the ability and energy of its members.

D. LUTZ & SON,—*Proprietors of Allegheny Brewery and Lion Brewery,*

1 to 11 Spring Garden, Allegheny.

Next in importance to the productions of the iron, steel and glass works of Pittsburgh and Allegheny, which have given these twin cities a world wide celebrity as the great industrial and manufacturing centre of the Western Hemisphere, comes the manufacture of lager beer, in which branch of business an immense amount of capital is invested. Prominent among the firms engaged in this important industry is that of Messrs. D. Lutz & Son, which has for more than a quarter of a century been identified with the brewing business in Allegheny county, and which from a comparatively small beginning has become one of the best known and most reliable firms in the West, owning and carrying on two extensive establishments and controlling a trade of nearly \$200,000 per annum. THE ALLEGHENY BREWERY, which is one of the oldest and most complete breweries west of the Allegheny mountains, was founded in 1853 by the firm of Lutz & Walz, and is located at Nos. 1, 3, 5, 7, 9 and 11 Spring Garden avenue, Allegheny city. The buildings consist of one three-story brick structure 50x44, one three-story brick building 32x140, one two-story brick structure 50x108 and one two-story brick building 25x38. These spacious and commodious edifices are supplied with the most complete and perfect machinery, appliances and appurtenances known at the present day for the speedy and satisfactory production of this delicious and invigorating beverage, including one thirty-two horse power steam engine and capacious boiler. The cellars, vaults, ice houses and refrigerators are admirably constructed and arranged, and all the appointments in every department are thoroughly first-class. The average stock carried at this establishment is not less than \$20,000 and the annual sales from the Allegheny Brewery alone amount to more than \$105,000. Over 15,000 barrels of beer are manufactured per annum at this establishment and the demand is always fully equal to the supply. The firm of Lutz & Walz, original proprietors of the Allegheny Brewery, was dissolved in March, 1879, by the death of Mr. Xavier Walz, who was lost at sea on the ill-fated steamer "Pommernania" while returning from a visit to his native land. Mr. Anton Lutz, son of the senior partner was admitted to an interest in the business and the firm name and style became as at present. These gentlemen are also proprietors of the celebrated LION BREWERY, on the corner of Vineal and Villa streets, Allegheny city, which was originally established in 1853 by Hechelma & Co., changed to the Lion Brewing Co. in 1874, and in 1878 to Lutz & Walz, and in the following year came into the hands of D. Lutz & Son. The entire establishment comprises five spacious and commodious buildings devoted to the manufacture and storage of the celebrated lager beer, which has attained such an enviable reputation throughout this section for its purity and general excellence. The buildings are as follows: one two-story frame 28x46, one three-story brick 54x72, one two-story brick storehouse 30x42, one two-story frame 30x12 and an ice house 46x72, with a capacity of 1,200 tons. The annual products of the Lion brewery are about 12,000 barrels, amounting in value to more than \$70,000. The average stock on hand is estimated at about \$18,000. The vats, tubs, tanks and other requisite machinery and appliances are of the most approved construction and style and in every way perfectly adapted to the requirements of the business. Power is supplied by one large boiler and one 26-horse power engine. Every department of this extensive establishment is conducted in the most perfect and systematic manner and all the appointments and appurtenances are of the very best. Eighteen experienced hands are employed with a weekly pay-roll amounting to \$220. The reputation of Pittsburgh and Allegheny beer is rapidly acquiring a national reputation, and we have no doubt that within a very short time the export trade in this now standard national beverage will exceed that of many of her older and hitherto more important industries. Mr. D. Lutz, the senior member of this enterprising and reliable business firm is a native of Wurtemberg, Germany, and was born in 1822. He has resided in Allegheny since 1848 and is one of her most respected and honored citizens. Mr. Anton Lutz was born in Pittsburgh in 1853, and although yet a young man possesses excellent business qualifications. Both gentlemen stand deservedly high in the community.

BILLINGS' PATENT HORSE SHOE,—G. K. Flowers, 164 Penn Av.

Another new and important branch of industry has recently been established in Pittsburgh, which is destined to become one of considerable importance, and will undoubtedly entirely revolutionize the old method of horse-shoeing. The improvement, which is known as the Billings' Patent Horse Shoe, possesses many advantages over the style at present in use, among which we may enumerate: 1st. Its economy, being far cheaper in the end than the old style of shoe. 2d. Its durability, being constructed on scientific principles and of such material as to outwear any and every description of shoes heretofore in use. 3d. Its convenience, as it requires no fire, and, with little previous experience in shoeing horses, can be put on by any one, thus dispensing with the time, trouble and expense of taking the horse to a blacksmith's shop. 4th. Its utility, being lighter, stronger and better adapted for ensuring a firm, sure foot-hold for the horse, while the conformation of the shoe induces growth and health of the foot, and is a sure remedy for corns and interfering. The shoe consists of a light steel plate properly tempered, with a continuous flange instead of the old-fashioned heel and toe calk, thus obtaining a firm, sure foot-hold on the pavement, giving the horse the purchase and strength of the entire breadth of his foot. As a Summer shoe, it is unequalled for speed or draught horses; and, as a Winter shoe, it is equally excellent, as the flange presented to the frozen earth is drawn to a sharp edge and deeply serrated. In connection with this unrivalled shoe, Mr. Flowers has also an "Ice Creeper," an ingenious and valuable invention for preventing horses from slipping on the ice or frozen ground, which can be applied to or detached from this shoe at pleasure, without removing the shoes. The Creepers consist of three pieces of hardened steel attached to the front or toe of the shoe, and to each heel calk, by a small nut and screw bolt. These can be adjusted to any style of shoe, are simple in construction, are perfectly safe and a sure proof against horses slipping in Winter. These inventions will for all time stand upon record as the most important of the nineteenth century. Horse owners in any section of the country can receive all information relative to these important inventions by calling upon or addressing Mr. G. K. Flowers, No. 164 Penn Av., Pittsburgh, Pa.

JOSEPH TURNBULL & CO.—Miners and Shippers of Coal; *Office, No. 10 Smithfield St.*

The industries pertaining to the production of Coal, its shipment by rail or river, and conversion to coke, &c., have always been of such staple importance to this community as to direct the particular attention of this work to all those firms or individuals whose operations involve any of these interests. In making, therefore, a detailed review of the Coal trade of Pittsburgh, the firm of Joseph Turnbull & Co., as being among the largest producers and shippers, demands more than brief notice. This house was established in 1869, and at once entered upon a remarkably prosperous career as miners and shippers of Coal, Nut Coal, and Slack. The mines are situated in Fayette Co., Pennsylvania, where the company possesses 260 acres of choice Coal lands, from which are mined annually from 500,000 to 600,000 bushels of Coal—a product that represents the labor of 100 operatives, to whom are paid not less than \$5,000 per month. The mines are located near the Monongahela river, in Pool No. 4, with which connection is made by from one to two miles of railway, the Coal being dumped at once into the flats and barges of the firm, of which there are about 35, the same being conveyed to the western and south-western markets by the steamer Hunter No. 2, also the property of the concern. The bulk of the product, however, being sold in Pittsburgh. Both members of the firm are of English origin, Mr. Joseph Turnbull having been born at Newcastle, Durham Co., in 1827, removing to this country at the age of 25, and settling in Pittsburgh at that time. Mr. John Hull is from Northumberland county, born in 1838. He removed to the United States in 1864, and since that period has been a resident of this city. From the honorable character of its policy, the firm has achieved a position in the trade that but few houses ever acquire. It is distinguished for promptness, enterprise and liberality—the exercise of which has greatly augmented the business of the concern during the past few years.

D. CHESTNUT & CO.—Leather, Hides & Oil, 315 Liberty St.

This house was founded in 1857 by the firm of DeLange & Chestnut, and after ten years the present firm came into possession. They occupy the spacious three-story brick structure 20x110 feet in size, at No. 315 Liberty street, and carry a stock ranging from \$12,000 to \$20,000, consisting of a full line of every description of leather, hides and oil, belting, hose and packing, salted and dry hides, sheep pelts, gum goods, belt rivets and lacing, fair skirting, pad skins, currier's tools, glue scraps, leather scraps, and in fact every article pertaining to this line of business. Special attention is devoted to the supply of red or hemlock sole leather for the trade. They rank among the largest dealers in green salted and calf hides, which they procure principally from Eastern Ohio and Western Pennsylvania. They also keep every variety of tanners' and curriers' supplies, including pure bank straits and Labrador cod oil. They are sole agents for Western Pennsylvania for a superior quality of raw hide lacing. This firm does a considerable export business in hides, and their trade, which amounts to not less than \$75,000 per year, extends over the greater portion of the United States. They make a specialty of saddlers' and harness makers' supplies. Mr. Chestnut is a native of Pittsburgh and at present resides at West Bellevue, on the line of the P. Ft. W. & C. R. R. He is a self-made man and commenced in this business when but sixteen years of age at a salary of two dollars and fifty cents per week, and has followed it without a day's intermission ever since, and on the same street and in the immediate vicinity of present location.

HENRY WILHELM,—Lager-Beer Brewer, 2600 Josephine St., South Side.

The manufacture of Lager Beer of a superior quality was commenced by Mr. Henry Wilhelm in 1865, with moderate means and on a comparatively small scale. His brewery is located at No. 2600 Josephine St., South Side, and is supplied with all the necessary apparatus and machinery for the production of this popular beverage. The demand for his beer has increased so rapidly of late years that Mr. Wilhelm has been compelled to make frequent additions and improvements to his establishment, in order to meet the requirements of his customers; and at the time of compiling this work he is engaged in making still more extensive additions, which, when completed, will add greatly to his facilities, and his brewery will be one of the finest and most complete in the city. Mr. Wilhelm is a practical brewer of many years' experience, and manufactures a high grade of Beer, which is deservedly popular with dealers and consumers throughout the city, and his trade is large and satisfactory. With the completion of his present improvement, his facilities will be such as to enable him to produce, if possible, a better article than ever before, and to supply the trade promptly with whatever quantity may be desired.

H. F. OLNHAUSEN,—Plumber, Gas & Steam Fitter, Carson St. bet. 12th & 13th, S. S.

This establishment was started by C. Olmhausen in 1865 with a comparatively small capital, at No. 40 Fourteenth street. The increase of trade has compelled removal to present location, where an increased stock of articles are offered as complete as the necessities of the trade calls for. The stock on hand embraces everything required in a plumbing and Gas-fitting establishment. Mr. Olmhausen is a thoroughly practical Plumber, Gas and Steam Fitter, and is generally looked upon as a first-class mechanic. He also employs from three to six hands constantly and has built up a good paying business, worth from six thousand to eight thousand dollars a year. H. F. Olmhausen was born in Pittsburgh in 1854, on the South Side, his parents being among the first settlers of Birmingham when it was a village. He is well known as a persevering and energetic business man and a genial, courteous gentleman, with whom it is a pleasure to deal.

STONER & McCLURE,—Pittsburgh Saw Mills, 27th St.*Bridge, Barge, Building and Railway Lumber and Box Factory.**Keg Factory, 25th Street.*

The situation of Pittsburgh with reference to the timber growing districts of Western Pennsylvania has always conducted to give it importance in the lumber trade, representing at the present time not less than \$4,000,000 worth, a trade that has in no little degree added to its industrial prosperity. Its magnitude and extent would perhaps be more thoroughly appreciated, were it not so overshadowed by the greater staples of iron, steel and glass. There are a number of firms engaged in the various branches of the lumber business, employing in the aggregate a vast capital. Some of these establishments are mammoth in their proportions, and are supplied with every requisite facility for the manufacture and handling of lumber in all its various forms. At the very head of these is the firm of Stoner & McClure. Their establishment is one of such vast proportions and of such perfect arrangements, and occupies such a prominent position among the manufacturing interests of Pittsburgh, as to demand prominent mention in a work devoted to the industrial history of the day.

This establishment was originally founded by Mr. Leek, then passed into the hands of Heath & Duff, who were succeeded 30 years ago by McClintock & Cochran, and even in that day was known as the "Old Saw Mill." The changes that have since occurred, however, have spared nothing of the old structure or its machinery, the site alone remaining, upon which stands its enlarged successor. Prior to the organization of the present firm, in 1873, Alex. McClure & Co. had carried on the business for many years, making frequent additions and improvements, and, by the introduction of the most perfect machinery, adding to the capacity of the mills, which at present exceeds 40,000 feet of lumber per diem, besides the production of the Keg factory on 25th street, which is capable of turning out 3,600 kegs a day, to say nothing of the Box factory, which is as well equipped as any in the city. The works are most admirably located, being built on the banks of the Allegheny River, having a large frontage and splendid harbor, in which is anchored at all times millions of feet of the finest stocks of lumber that can be found in the great lumber regions of Western Pennsylvania. From the Allegheny Valley Railroad a siding is run into the yards, affording the most complete facilities for loading and unloading. A powerful crane is erected in the yards, by means of which enormous timbers, used for bridge, railroad, or other purposes, are lifted and swung on the cars with the greatest ease, enabling two men to do in a short time what it would require a dozen or more a day to do unaided by machinery. From the river to the mill chutes and tramways are constructed, by means of which the logs and lumber from the river are hoisted rapidly into the mill, which stands like some fabled monster, ready to devour whatever enters its capacious jaws. The dust from the saws, by an ingeniously constructed and powerful fan, is driven through a boxed channel a distance of more than 100 feet into an iron clad building built for its reception, from which it is easily and simply loaded into the wagons that are constantly seeking it. The slabs and other inferior parts of the lumber are cut by special devised saws into various pieces and lengths, some used for boxes and others in their keg factory. In a most wonderful manner is, thus, every particle of the logs cut and used in the production of various useful and necessary articles. A new mill is now being erected that will have a capacity of cutting 20,000 feet of lumber each day. Four powerful and fine engines are employed to drive the great number of saws, planes and other machinery. These mills and works, indeed, in every respect, are perhaps the most complete and perfectly arranged of anything of the kind in Western Pennsylvania. In the production of bridge timbers and railway lumber supplies and in barge building, the firm has already gained a high repute, especially for long timber and the finer grades of lumber, contracts being made for building barges, boats and flats of all descriptions, and the furnishing of bridge material at any point in the United States with the utmost promptitude. As illustrating the prompt manner in which orders are filled as well as the capacity of the establishment, a telephonic order was received recently, at 4 P. M., for the delivery of 20,000 feet of timbers, 6x6, to be delivered at a distant point in the city the following morning. The logs from which the order was to be cut were floating in the river; with remarkable energy the work was commenced, and at daylight the following morning the 20,000 feet were on board the cars ready to be transported to their destination. For the rapid and superior manufacture of nail kegs the firm has unusual advantages, being in possession of ingeniously devised and patented machinery for this purpose, the right to use in this county being vested solely in Stoner & McClure, and their facilities are unequalled in the United States. There being but one other establishment and that of small dimensions in which this wonderful machinery is used. This keg factory is in many respects a marvelous concern, 7 machines of different kinds are used in the manufacture of various parts of the kegs, and they are capable of turning out 3,600 completed kegs per diem, and require a force of but 3 men and 50 boys to attend them. A perfect machine is used also to count the number of kegs, which is done by it in a wonderful and perfectly correct manner. The keg factory consumes much material from the mills that otherwise would be lost. Mr. C. L. Stoner is a native of Lancaster Co., this State, and was born in 1823 in the town of Millersville. Before coming to Pittsburgh he was engaged in the city of Lancaster in the business of contractor and builder, where he enjoyed a high reputation as enterprising man of business, and an honored and respected citizen. He held the position of clerk of Orphans' Court in his native county for a number of years, rendering efficient and valuable services to the people in that capacity. He came to this city in 1866, and prior to engaging in his present business was engaged in the coach business, having been the head of the firm of Stoner & Marlatt. In entering his present business he has found a field affording him abundant facilities for the exercise of his known enterprise and abilities. Mr. Alex. McClure was born in this city in 1843, and has always been identified with the lumber business, of which his knowledge is thorough and detailed. His father having been engaged in the same branch of industry, Mr. McClure may properly be said to be indigenous to the trade, which he has greatly promoted by his efforts and enterprise. Mr. Nathan Jones, who is also intimately connected with the firm and has charge of the office business of the concern as well as aiding in the general supervision of the business, has been connected with the establishment under its previous management for 8 years. He is a native of Pittsburgh, born in 1851, and is a gentleman of great energy and ability. As a firm with which to establish desirable relations in connection with its special work it is universally admitted to be a reliable one in every respect, and can perhaps offer inducements to buyers not readily duplicated in this or any other market. Liberal, energetic and just in its business policy, the house of Stoner & McClure has achieved a signal success without the sacrifice of an honorable position.

JAMES W. WOODBURN,—Marble, Stone & Granite Works, 81 Thirteenth St.

These works were originally established by Mr. James W. Woodburn, in 1875, with a small capital, but which, by economy and industry, combined with enterprise, has been considerably increased. He is now located at No. 81 Thirteenth St., South Side, where he is prepared to fill all orders for Marble or Granite Monuments, Headstones or Slabs for friends of the deceased, or for house or other purposes, upon the most reasonable terms. Mr. Woodburn is a practical mechanic and most skillful workman, and all work being under his personal supervision, will compare favorably with that of any similar establishment in this city, and cannot fail to give satisfaction. All orders entrusted to him will be promptly and accurately filled, and are respectfully solicited. Remember No. 81 Thirteenth St.

JOHN H. FITZ,—Dealer in Tobacco, Cigars, &c., No. 64 Seventh Av.

Mr. Fitz started this business in 1877. He keeps a general assortment of choice Tobaccos, Cigars, Stationery, Confectionery, Toys, &c., and is doing a fair business. His room is 20x35 feet in size. Mr. Fitz was born in Waynesboro, Franklin Co., Pa., in 1848. Came to this city in 1869. He is district assessor of his ward, 3d district. He was burned out during the riot of July 22, 1877, by which he lost nearly all he had. Since then he has started up, and enjoys a good trade.

BIRMINGHAM FIRE INS. CO.—*General Office, 1325 Carson St., S. S.*

Among the financial institutions of the Iron city the Birmingham Fire Insurance Company occupies a prominent position and ranks among the most successful and reliable Insurance Companies of the State. It was organized in 1871 with a capital of \$200,000, and since its beginning has entered upon a very successful and prosperous career and has had from the first the confidence of the business community. Its affairs have always been managed in the most conservative manner and it has always inspired, as it justly merited, the most favorable consideration from its patrons and the general public. Its officers and directors are men of high character, possessing the confidence of the community in an eminent degree, a fact that has largely contributed to the prominence its occupies at present. The Company occupies a large handsome brick building, and their office is fitted up in a neat and convenient manner. Its business, which at first was mainly local, has been gradually extending throughout the city and Western portion of the State, and is still growing and widening as it justly is entitled to do. Its patrons are met with the most liberal treatment, and its losses have always been met in the most prompt manner. The business the past year, which has been an unprecedentedly dull one for Insurance Companies, reached very comfortable figures, and has enabled the Company to add very materially to their growing surplus fund. The officers of the Company are:—Chas. Mellings, President; a gentleman of high character and financial abilities. He is a native of Germany, born in 1826, and emigrated to this city in 1851, since which time he has been closely identified with the industrial interests of the Iron city. Mr. Wm. Ruske, Secretary, with whom the patrons of the Company more generally come in contact, is a gentleman of abilities, well known throughout the city, and is universally esteemed for his many genial qualities. He was born in Germany in 1842 and came to this country in 1867, and in a few years thereafter entered his present position, where his abilities and energies have largely contributed to the success of the Company he represents. The Birmingham Fire Insurance Company is an institution with whom it is always safe to insure.

THOMAS FLEMING,—*Grocery and Bakery, 301 Webster Av.*

One of the most enterprising and thorough-going business men in that section of the Iron city is Thomas Fleming, Esq., dealer in groceries and provisions, baker and confectioner, No. 301 Webster avenue. His is the leading establishment in that section and very properly enjoys the patronage of the best class of citizens. The store Mr. Fleming occupies has been a prominent place of business for a number of years and he only opened here in April last, since that time has received a very encouraging support. He carries a stock of from \$10,000 to \$12,000, embracing every desirable article, fresh and new for home and table consumption. He also produces from select flour the choicest bread, cakes, pies, etc., in the market and besides giving him credit for keeping one of the leading and most attractive stocks in the city, we are satisfied that he possesses the proper business qualifications, tact and energy to succeed. His courteous attention and prompt habits are such as must continue to add to his numerous friends and patrons. He occupies a two story building 24x40 feet in size, constantly receiving fresh supplies, and his prices will always be found as low as any establishment of the kind in the city. Special attention is given to producing the finest bread in the city; he will also make choice cakes for parties to order. His business is rapidly growing and his present enterprising spirit will always assure him a high place among the business men of Pittsburgh. He was born in Ireland in 1849 and came to this city in 1869.

ALLEGHENY BREWERY,—*Thos. Booth, Prop'r., 459 to 467 Rebecca St.*

The celebrated "Spring Water Ales" manufactured at the Allegheny Brewery, and which have attained such a wide-spread reputation, derive their name from the fact that they are made exclusively from pure spring water, an inexhaustible supply of which is obtained on the premises occupied by the old and well known brewery. This spring water is admirably adapted for the manufacture of ale, as it flows direct from the rocky bed as clear as crystal and as cold as ice. For over half a century it has been running continually without the slightest change in quality or quantity, and for this period utilized quenching the thirst of two generations. The Allegheny Brewery was established more than fifty years ago without the extensive buildings and expensive machinery required in a brewery of the present day. It was subsequently re-established on a permanent basis by R. A. Irwin & Co. Half a century has brought many firm changes in its management, Campbell & Rhem conducted the business for over twenty years, followed by W. W. Anderson & Co., Smith & Co., Young & Booth, the present owner, since 1866, who has made many very essential and extensive improvements. The buildings now occupied by him cover an area of 108x129 feet, two stories in height, and have a capacity of 30,000 barrels per annum, as running at present he produces about 10,000 barrels. Two steam engines of twenty-horse power are supplied with water from an artesian well on the premises 112 feet deep, which also furnishes an abundance of water for other purposes throughout the building. Mr. Booth manufactures his own malt and deals extensively in hops. He employs twenty-five men and his trade extends through all the adjoining counties. The vaults and cellars used for storage are capacious, cool and conveniently arranged and all the appurtenances of the establishment are first-class in every particular. The ales and porter manufactured here meet with a ready sale and are considered superior in many respects to those of other breweries in the West. Its valuable medicinal qualities are highly recommended by leading physicians.

J. HOLZHEIMER,—*Furniture and Chairs, Main and Ninth Sts.*

Also Proprietor of the Sharpsburgh Livery and Sale Stables.

The above gentleman began his business career in 1867, locating in Sharpsburgh, where he has remained ever since. His business consists of the manufacture and sale of Furniture, Chairs, Coffins, &c. In connection with this, he is sole proprietor of a Livery and Undertaking Establishment, also located in Sharpsburgh. He was born in Germany in 1839, and came to this country in 1853. His friends have shown their appreciation of his merits by electing him school director, a position which is highly valued by the citizens of that enterprising little borough.

JAMES A. ROBINSON,—*Coal, Lime and Cement, Sharpsburgh.*

James A. Robinson is engaged in the Coal, Lime and Cement business, and is doing a rushing trade. His building is 40x130. He began business life as a coal and feed dealer, but concluded to quit the feed business, and embark in the Coal, Lime and Cement trade. He has met with unbounded success.

JOHN A. LYDICK,—*Dealer in Family Groceries, 24 Collins Av., East End.*

The general grocery business was begun by Mr. Lydick in 1876, with a capital of about \$600. This he has very considerably increased. He is now doing a business of about \$12,000 per annum. His stock consists of every variety of first-class Groceries and Provisions, and always gives bottom figures. Mr. Lydick was born in the adjoining country of Indiana, in 1838, and came to this city in 1856. He began here as carpenter and builder, but gradually glided from that pursuit into his present line of life. He is a popular merchant and esteemed citizen.

ALLEGHENY CITY FLOUR MILLS.—*L. Walter, Sr., & Son,* *Nos. 149, 150 and 151 South Canal St., Allegheny.*

These extensive mills have been in existence since 1836 under various proprietary titles. Mr. John Vogler was the original owner who conducted the business successfully for sixteen years, and in 1852 was succeeded by the firm of Hays & Walter, (the latter gentleman being senior partner of the present firm). In 1855 the proprietorship was vested in the firm of Nicholas & Voegtly, who were in turn succeeded in 1862 by Gilmore & Co. In 1877 Mr. Walter, Sr., again became interested in the firm, and in the following year purchased the interest of Mr. Gilmore and became sole proprietor, subsequently his son, Mr. Leonard Walter, Jr., was admitted as a partner under the firm name of L. Walter, Sr., & Son. This firm are also extensive Lumber Dealers, with Yard located at No. 115 River avenue, where they occupy an area of 120x250 feet. They deal in Hard Lumber and Pine Lumber only, which they obtain mostly from Tennessee and Indiana. They keep a full and choice stock and enjoy an excellent local trade. The average value of the stock carried by this firm is about \$15,000 and their annual sales amount to not less than \$150,000. The mills are supplied with all the latest improved machinery, driven by an engine of ninety horse-power with three boilers. The old mill was destroyed by fire in 1877 and was rebuilt on an enlarged and more extended scale with machinery entirely new and unsurpassed for general completeness by that of any similar establishment in the United States. The finest grades of choice Family Flour are made a specialty at these mills, and the high character and unblemished reputation of this house during the past forty years have been fully and honorably maintained by the present enterprising proprietors. The firm also manufacture large quantities of Mill Feed, which meets with a ready sale. Their trade is principally derived from Pittsburgh, Allegheny and the various towns in the immediate vicinity, and is steadily increasing from year to year. Mr. Leonard Walter, Sr., is a native of Germany and was born in 1811. He came to Allegheny in 1833 and for forty-six years has been identified with the business interests of the city. He has for many years been a member of the poor board of Allegheny, which position he filled most acceptably and wisely, but for personal reasons he has recently been compelled to resign. Mr. Leonard Walter, Jr., his son, was born in Allegheny, in 1839, and is an active, energetic business man. Both gentlemen are highly esteemed as citizens and business men in the community in which they reside.

JAMES McKIBBEN,—*General Teaming Business, 50 Fountain St.*

This business was started by Mr. McKibben as early as 1849, with a small capital, which he has since then very largely increased, the result of it being a successful and prosperous business, having at present about one hundred head of horses, with wagons and carts of all kinds and latest improved patterns and styles to suit the various calls, the value of which is over \$40,000. His annual business is very large, occupying one large building for his horses 100x90 feet, all well arranged with yard room grounds, 230x109 feet. Employing 45 hands with a weekly pay-roll of \$500. His business extends all over the city and vicinity, making regular deliveries of all kinds of merchandise and goods generally. Mr. McKibben was born in Ireland in 1833, came to this city in his youth in 1846 at the age of 13 years and three years later, in 1849, he started into business for himself with the then well known and popular drays, and successfully established himself as one of the popular draymen in this city, always first to receive the goods at the depots and places of business, and make his deliveries with promptness and dispatch, which he still does, being one of the most successful and popular men in his line in this city. Mr. James McKibben has also graced the halls of City Council as member from his ward and district, also as member of board of School Directors, with present term for sixteen years. He is an intelligent and public-spirited man and an honor to any position. During the ever memorable riots of July 22nd, 1877, he was burnt out, having his buildings, wagons and harness destroyed, barely saving his horses; his loss amounted to over \$10,000, and without any recompense whatever, so far, but being energetic and persevering he immediately rebuilt, and at once re-established himself and is doing a flourishing and prosperous business. Mr. McKibben is well worthy the public favor and patronage so liberally bestowed.

FREDERICK KOBER,—*Tanks, Oil, Ale and Whiskey Barrels, 44 Fountain St.,* *Near Seventh Av.*

This business was first started about 1849, on these premises. Mr. Frederick Kober commenced business here for himself in 1865, with a small capital, which he has largely increased. He always keeps a good stock of material on hand and a large force of men at work filling orders as fast as they come in. Mr. Kober is doing a very fair business, amounting to from \$35,000 to \$40,000. He has two buildings occupied for his work in manufacturing Barrels. None better made in this market than are daily turned out of his establishment by his skillful and practical workmen. He gives employment to 21 hands of the most skilled men in the trade. The buildings are, one 24 feet front by 64 deep; second, 24 by 38 feet—regular beehives of industry. His average weekly pay-roll is about \$250. Mr. Kober has the reputation of turning out some of the best Barrels manufactured in this State; he also has grounds outside his buildings for storing stock in his trade, with his residence close by. These works are equal to any, and his trade extends over Pennsylvania, Ohio, West Virginia, New York, Maryland, North Carolina, Georgia, and even California. Manufacturing tight Barrels, as he does, and making tight work a specialty, they recommend themselves wherever they go. Mr. Kober has made several improvements in his mode of manufacturing. He was born in Germany in 1832, and came to this city in 1860 and established himself in business shortly afterwards. He is energetic, industrious and thrifty, and with his native industrial habits is sure to succeed. During the ever-memorable riot of July 22, 1877, Mr. Kober was unfortunate enough to be located in the midst of it, and was totally burnt out, losing his works and buildings, saving nothing even of his household goods except the clothing on his and his family's backs, and barely saved his desk with his books and papers, his loss amounting to over \$12,000, for which he received no recompense. But, being energetic and enterprising, he has managed to rebuild, and, Phoenix-like, to rise from the smoldering ruins and burning embers, and is now successfully re-established and doing a very extended business, which is a credit to the city, and of which he may well feel proud.

ALBERT FIEDLER,—*Manufacturer of Swiss Bitters, No. 113 Eighteenth St.*

Among the manufactured articles of the Smoky City there are none whose novelty and excellence will find a more ready appreciation than the celebrated Swiss Bitters, manufactured by Mr. Albert Fiedler at No. 113 Eighteenth St. The business was started in 1864 by Mr. Arnold Koch, by Mr. Fiedler in 1878. The present proprietor is making fine, palatable, as well as healthful goods, which became popular, and has commanded a ready and increasing sale throughout Ohio, Virginia and western Pennsylvania. This business occupies three rooms and cellar, and orders are promptly filled on most reasonable terms. Mr. Fiedler was born in Germany in 1842, and came to this city in 1866.

ROBT CHESSMAN,—*Livery and Sale Stables, Etna.*

Robt Chessman, born in New Hampshire, Jan. 19, 1820, came to Etna, Pa., in 1835. In 1877 he embarked in the livery and sale stable business, with a capital of \$1,000. There are two buildings facing on Bridge street, consisting of a carriage house, 40x70, and a stable 30x50. His trade is located in the borough of Etna and adjacent country. First-class rigs can always be obtained here for funeral or pleasure parties.

WM. FLACCUS & SON,—*Tanners; Office and Warerooms, 357 Liberty St.
Tannery, No. 170 Spring Garden Av., Allegheny City.*

For many years the tanners of this city have enjoyed the well-earned reputation of making the very best Leather obtainable in the country—a reputation that has been confirmed by numerous awards at the great competitive exhibitions of the world. As a branch of industry peculiarly successful in Pittsburgh, those engaged in it are more than ordinarily entitled to consideration in the compilation of a work bearing solely upon the resources and advantages of the Iron City as a commercial, manufacturing or producing center. Among those who have done no little to establish the Leather trade upon its present admirable foundation, the house of Wm. Flaccus & Son is perhaps the most widely known. The originator of the business was Wm. Flaccus, Sr. (now deceased), who, with an extremely limited capital, commenced operations as a Tanner 30 years ago. His efforts, though backed by very little money, were sustained by rare judgment, natural talent and unwavering integrity; with these, year after year his business increased, until, in the hands of his sons, at the present time (though under the old style), the trade of the firm, at store and tannery, will average \$250,000 per annum. The individual members of the house are now William, George and Edward Flaccus. The tannery is located in Allegheny, and is a brick building three stories high and 100 feet square. From 25 to 30 hands are employed here, and a steam engine of 30 horse power, with every improved modern appliance necessary in the manufacturing of Leather. They turn out large quantities of Harness Skirting, bridle and upper Leathers, and Splits. They make a specialty of oak-tanned Harness, in the production of which they greatly excel. The warehouse, at 357 Liberty St., is devoted not only to the sale of their own products, but a general jobbing trade in Leather, Findings, Hides, Pelts, Tallow, Tanners' Oil, Glue, Bark Extracts, and complete lines of Tanners' and Carriers' Supplies. With a capital of \$100,000, a trade extending over the entire West, North-West, South and East, and a business policy of the most liberal kind, it is right that Wm. Flaccus & Son should hold the high position accorded them in commercial and manufacturing circles, and continue a prosperity so well deserved.

SAMUEL BARCKLEY,—*Grocers' Produce & Fresh Meats, Webster Av. & Gum St.*

Here Mr. Barckley has been located for upwards of thirty years, having started this business at this place originally with a small capital, but which he has very largely increased, having quite a large establishment and doing a wholesale and retail business, which is a credit not only to the locality in which it is located, but also to the city of Pittsburgh. Mr. Barckley carries a stock of goods unsurpassed by any establishment of its kind, amounting to about ten thousand dollars. He has a well-established trade, extending over a large part of the city, also to Allegheny City, making regular deliveries daily with his wagons which he keeps going constantly, supplying public houses as well as private families, and doing an annual business to the amount of about forty thousand dollars. This in itself shows the high esteem in which Mr. Samuel Barckley is held. He always keeps a full supply of all the various goods to be found in the market. The very best Coffees, Teas, Sugars, Butter, Flour, Eggs, Spices, Vegetables of all kinds in their seasons, all kinds of Canned Goods, choice varieties of Fresh Meats daily, Smoked Meats of all kinds, and, in fact, every variety of articles to be found in any similar establishment. Mr. Barckley attends to his business himself and has it constantly under his supervision, with the able assistance of his sons, employing four assistants in his establishment. Mr. Barckley has always enjoyed popularity, and held office in the City Council, and has been School Board Director a number of times. At present he holds the office of President of the Grocers' Association of Allegheny City. Mr. Barckley was born in Ireland in 1823, came to this city in 1842, and has been fully identified with this city and its public good. He has accumulated quite a competence in bank stock and other property.

MRS. F. M. YOUNG,—*Dressmaker & Milliner, Penn Av., opp. Frankstown Av.*

Mrs. Young has proved herself one of the most persevering and enterprising ladies of Pittsburgh and has been correspondingly successful. She commenced business in the East End, near her present location, in 1876, on a small capital, considerably below one thousand dollars. She possessed, however, talents and taste, which peculiarly fitted her for the business she had chosen. She at present carries a stock varying from three thousand to five thousand dollars in value and does an annual business approximating ten thousand dollars, and giving constant employment to twelve hands. Mrs. F. M. Young was born in Ireland and came to this country some seven years ago. She is a lady of refinement and rare natural talents, and enjoys in a pre-eminent degree the respect and confidence of all who do business with her. She enjoys a large trade among the elite and fashionable families of the East End.

FRANZ & DEUTENBERG,—*Carriage Builders, etc., 18th & Jane Sts., S. S.*

Prominent among the firms engaged in business on the South Side is that of Franz & Deutenberg, Carriage Builders. The business was founded by the present proprietors in 1866 with a capital of four thousand dollars, which has, during the past thirteen years, considerably increased. These gentlemen occupy four spacious and conveniently arranged buildings fitted up with all the necessary machinery and appliances for carrying on their extensive business in its various departments of Wood Working, Carriage Trimming, Painting, Blacksmithing and Iron Working, and Sales-rooms. They produce the most improved, stylish and substantial Carriages, Buggies, Spring Express and Road Wagons of every description. They also make a specialty of Repairing in wood work or iron, Painting, Trimming, etc., and their business will compare favorably with any similar establishment in the city. They enjoy a high reputation for first-class work, which is their specialty. Mr. J. B. Franz was born in Germany in 1838, and came to this country in 1854. He has resided in Pittsburgh since 1863, and is a thorough, practical mechanic. Mr. F. A. Deutenberg is also a native of Germany and was born in 1836. He has resided in Pittsburgh since 1853. Both members of the firm are thoroughly conversant with all the details of the business in which they are engaged.

BOYLE & McGLINCHEY—*Livery & Undertaking, Washington St. & Bedford Av.*

This firm first started in business here in 1873 with a small capital, which they have since considerably increased. They have a stock in their lines of business all first-class, consisting of horses, carriages, buggies, wagons, etc., of between three thousand and four thousand dollars, and are doing a proportionally large annual business. Being clever and accommodating they are rapidly gaining public favor. Their business principally is city trade. Mr. Dennis J. Boyle was born in Allegheny County, near this city, in 1852, and his partner, Mr. Dennis McGlinchey, was born in Ireland in 1845, and came to this city in 1868, where both became associated together in their present business, which they are steadily increasing. They give special attention to Undertaking in all its branches. They are well worthy of the patronage they receive.

JAY M. WHITE,—*Dealer in Drugs, Medicines and Chemicals, Etna, Pa.*

This business was started by G. Wm. Kredel several years since, and is now owned by Mr. White, who deals in Drugs, Medicines, Chemicals, etc. Physicians' prescriptions are made a specialty at this establishment, and mistakes never occur. Mr. White came to Etna in 1878 where he has a fine trade and enjoys high public esteem.

WM. SHORE & CO.—Groceries & Produce, London "T" House, 20 Roberts St.

Among the Grocery and Provision houses of the Eleventh Ward, indeed, we may extend the limits, there is none more worthy a conspicuous notice among the business industries of this city than that of Mr. Wm. Shore & Co., located at No. 20 Roberts street. Mr. Shore is a gentleman of culture and refinement as well as an enterprising business man. He is a native of England, where he was born in 1814, and came to this country and city as early as 1831, about half a century ago, since which time he has not only been associated with the business of this city, but has taken an active part in her political and civil well-being, having been one of the active participants of the old Liberty party and fully identified with its early political history. He has held the office of Alderman of the Eighth Ward for ten years. He is a carpenter and builder by trade, but has now for some years, since 1873, given special attention to the grocery trade, making the best class of goods the great object, at corner of Roberts street and Webster avenue. The best Teas in the market, choicest fragrant Coffees, choicest brands of Flour, Fruits, Spices, and indeed everything generally found desirable in a first-class store, at bottom figures. A stock is usually kept of about four thousand dollars, and the annual business transactions will reach from fifteen thousand to eighteen thousand dollars, the firm employing three hands to assist in the business. The company consisting of Mrs. M. Patterson, the widowed daughter of Mr. Shore, who takes great interest and constantly attends to business herself. This store is in a three-story brick building, 24x50 feet in size, first floor and cellar for store and business purposes, and which has become the most popular trading place in the ward. Squire Wm. Shore still holds the office of Notary Public and transacts any business pertaining to that office.

E. STORCH,—Marble, Granite and Stone Works, 1111 Carson St.

We cannot forget that to ourselves and our friends death will eventually come, and while those who pass from life's busy scenes are deposited in their last resting place of the body, we who are living can attest our respect for their memory and virtues by placing over their remains a tombstone or monument according to our affection and means. In this connection we may call attention to the excellent facilities presented in the way of Tombstones, Monuments, etc., at the Marble, Granite and Stone Works of Mr. E. Storch, No. 1111 Carson street. His facilities for supplying marble or granite for these purposes or building or paving stone, are not surpassed by any similar establishment in the city, and the excellent designs and superior skill displayed in his work is recognized as unsurpassed. The shop of Mr. Storch is at present a one-story building 20x35 feet in size, while his yard room is 40x40 feet. He employs for the most part four skilled workmen and can guarantee the prompt fulfillment of all orders and at prices which must make it an inducement to those in want of anything in his line. Mr. Storch was born in Germany in 1845, and came to this city in 1872. He is a prompt, efficient and reliable gentleman, and worthy the patronage he receives.

J. F. SADLER & CO.—Forwarding & Commission Merchants,

Dealers in Cattle, Hogs and Sheep; Central Stock Yards, East End.

This firm is one of the most extensive dealing in live stock in the country, and does business in Philadelphia, Jersey City, Pittsburgh and Cincinnati. It is composed of J. F. Sadler, Philadelphia, J. P. Beal, Pittsburgh, and Fort, Sadler & Co. of Cincinnati. At Pittsburgh the firm was organized in 1870 with a cash capital of \$5,000. It has at present \$52,000 invested in business at Pittsburgh, which amounts, including the forwarding branch, to \$6,600,000 annually. Enormous as this business seems, it is transacted with the nicest accuracy and precision and without the slightest confusion or entanglement, so perfect is the system prevailing in and governing all its departments. Messrs. Sadler & Co. employ twelve men in Pittsburgh, six in Jersey City, and numerous others in Cincinnati, St. Louis, Indianapolis and other places, as their immense business requires. All the members of the firm were born in the United States—in Indiana and Ohio. They are all energetic, enterprising business men, as their remarkable success irrefutably proves. J. P. Beal, the Pittsburgh partner in the firm, came to this city from Cincinnati in 1872. He is a gentleman of good character and executive ability and excellent judgment, and enjoys in a pre-eminent degree the confidence, not only of his brethren in the stock business, but of the entire community. His reports and notes of stock transactions are considered reliable and trustworthy, and find favor in the public estimation as well as in the press.

GEO. T. MacCORD, M. D.—Physician & Surgeon, 141 Wylie Av.

Dr. George T. MacCord was born in Washington County, Pa., in 1845. He graduated from the Waynesburgh College in 1875 in the degree of A. M. and entered life as a teacher, in which profession he met with remarkable success and won a wide and enviable reputation. In 1869 and '70 he conducted the public schools of West Liberty, Pa. In 1870 and '71 he had charge of the schools at Sharpsburgh, which he resigned in the latter year and accepted the position of principal in the Second Ward schools of Allegheny City, where he remained until 1873, when he assumed professional charge of the Curry Normal Institute, Pittsburgh. Here he remained until 1877, commencing with 60 students and leaving 210 enrolled at the time of his resignation. In 1877 Professor MacCord entered the Jefferson Medical College of Philadelphia and graduated with the highest honors of his class in 1879. He immediately entered upon the practice of medicine and surgery in Pittsburgh, where his acknowledged ability and large acquirements, together with his extensive acquaintance, render his success assured.

THEO. DOERFLINGER,—Druggist, 147 Wylie Av.

This is one of the most complete and popular retail drug stores in the city. It was opened by the present proprietor in 1876 with a capital of \$2,500, and a stock embracing every thing required in a first-class drug store, together with a line of toilet articles unsurpassed in variety and excellence. Mr. Doerflinger's business has been good from the out-set and is steadily extending and increasing. He carries at present from \$3,000 to \$3,500 worth of stock, employs one assistant constantly and is doing an average business of from \$5,000 to \$6,000 a year. Theodore Doerflinger was born in Pittsburgh in 1854. He commenced the study of chemistry, pharmacy and materia medica in 1865, when but a child, and has been a close and earnest student ever since. He is a courteous and refined gentleman, and a thorough and accomplished druggist. Mr. Doerflinger was elected in the winter of '79 to the School Board of his ward to serve for a term of three years.

J. J. KEIL,—Druggist and Pharmacist, Sharpsburgh.

Mr. J. J. Keil began business here on the 1st day of January, 1879. He had formerly been in business in Etua. With unabated zeal he went to work to build up a trade for himself, and has succeeded beyond all his expectations. He employs one clerk, at \$60 per month. He carries a stock valued at \$200⁰⁰. He was born June 8, 1855, at Sharpsburgh, and started to learn the Drug business at the age of 14 years.

ABEL & VOELLGER,—Bottlers of Ph. Best's Milwaukee Export Lager Beer, No. 469 Fifth Av.

Among the industries of the Smoky City there are few which take precedence in excellence and enterprise to that of Messrs. Abel and Voellger, bottlers of Phillip Best's Lager Beer, whose extensive establishments are located at 469 Fifth ave., while their post-office address is Lock Box 82. This beer has obtained popular favor wherever it has been introduced, for its sparkling clearness and excellent qualities. It has met in competition with the largest and best known establishments of the world, and from the best judges has claimed the highest meed of honor. At the Philadelphia International Exposition in 1876, the Phillip Best Brewing Company was awarded the highest medal for the superior excellence of their manufacture. At the international exhibition of Paris, in 1878, this company also captured the prize, and was awarded the gold medal. We do not know what greater honor or popularity could be achieved in this direction than has been given this establishment. The business of bottling Phillip Best's Brewing Co.'s Milwaukee Lager Beer was originally started by Messrs. Steinmetz & Voellger in 1872, with moderate capital and facilities, and by them conducted up to 1877, when Messrs. Abel & Voellger became the owners, and give special attention to this business, being the only bottlers of this beer in this city. The Phillip Best Brewing Company of Milwaukee, Wis., is an organized corporation with Fred. Pabst, Esq., as President, E. Schandeln, V. President, and Mr. Best, Jr., Secretary, and their superior beer has obtained a popularity near and far. While the Milwaukee Lager Beer, bottled exclusively by Abel & Voellger, is sold to private families only, with energy and skill of the most commendable character, this firm is now doing a business of about \$20,000 per annum, a business which must increase year by year. The individual members of this firm are Mr. Robert Abel and Mr. Albert Voellger. Both were born in Germany, the former in 1845 and the latter in 1846, and came here in 1867 and 1872 respectively. Mr. Abel is a gentleman of high standing in the community; from 1869 to 1873 he was Asst. Cashier of the 5th Ave. Bank, and Secretary of the German Amer. Insurance Company from 1873 to 1875, and has held other positions of trust, which he has filled with credit to himself, and to the satisfaction of his employees.

BEST & CO.—Printers, No. 91 Fourth Av.

Of the many firms engaged in the "art preservative" in this city, perhaps none have acquired so enviable a reputation for the production of elegant and attractive work as the firm of Best & Co., Printers, at No. 91 Fourth Av. This house was originally established in 1872 by T. F. Best, who conducted the business for four years, when the firm of Best & Scott was organized, which was only dissolved during the current year by the death of Mr. Scott, the senior partner, retaining and prosecuting the business under the title of Best & Co. The establishment occupied by the firm from being originally a very small one, has grown to considerable dimensions, and now engrosses a building 20x110 feet, with an L at the rear 40 feet long. The mechanical equipments for carrying on the business are very modern and complete, part of the machinery consisting of four presses, viz., one Potter cylinder and three job presses, which are operated by one steam engine. From seven to twelve operatives are constantly engaged at this establishment, most of whom are expert printers, the members of the firm also co-operating actively in the work, which embraces every variety of job, book and commercial printing; the trade rapidly increasing, and already reaching over the largest part of western Pennsylvania. Mr. T. F. Best is a native of Pittsburgh, born in 1854, and, though but a young man, has had a thorough education in his chosen vocation, and an experience which places him among the first in the trade as an expert, reliable and enterprising Printer.

PENNSYLVANIA FEMALE COLLEGE,—Fifth Av., East End.

Pittsburgh, although essentially a manufacturing city, probably comprises within its limits a larger number of educational institutions of a superior order, than any city of equal population in the Union. Certainly among those for the education of young women it would be difficult to select one to compare in thoroughness of instruction and extent of curriculum, with the subject of this sketch. The Pennsylvania Female College was incorporated in 1869 by the State Legislature, its object being the higher education of young women in the ancient and modern languages, the arts, sciences and literature. Its management is vested in a board of thirty trustees, comprising some of our most prominent clergymen, judges, lawyers and business men. The officers of the board consist of a president, two vice presidents, a secretary and a treasurer, and the present officers are as follows:—President, James Laughlin; Vice Presidents, Hon. J. P. Sterrett and Hon. Robert McKnight; Secretary, O. McClintock; Treasurer, Geo. A. Berry. The faculty headed by Miss Helen E. Pelletreau, the acting president, comprises fourteen experienced instructors in the several departments, while the course of study is broad and exhaustive, requiring for its completion the regular freshman, sophomore, junior and senior collegiate years of attendance, as well as embracing a thorough preparatory department. The situation of the college is, without doubt, the finest of any educational institution in the State. Located upon the most beautiful avenue within the limits of the corporation, yet far enough from the centre of the city, to be entirely free from its ever-encircling clouds of smoke and dust, and situated upon an eminence from which it commands a fine view of the East Liberty valley and the suburban wards of the city, the location may well be said to combine all the advantages of city and country. The Pennsylvania Railroad, upon which accommodation trains run at intervals of half an hour, winds through the valley about half a mile distant, East Liberty and Roup's Station being equally convenient to the college, and either being reached by a ten or fifteen minutes walk, while the Oakland street cars pass directly by the entrance gate every few minutes.

The cut found in another part of this work is a good representation of the building, but gives no idea of the beautiful landscape which surrounds it, a full description of which would require an article too extended for the limits of our space. The main building is of the Gothic order of architecture, and is of brick with stone facings; the main front on Fifth avenue extending 96 feet, while from the eastern front, which is 140 feet in length, a wing extends a distance of 62 feet, in which are contained the school rooms and dormitories. The structure is three stories in height throughout, and contains upwards of sixty apartments, each floor being supplied with gas and hot and cold water. The location is upon Fifth avenue, three and one-half miles from the centre of the city, a condition which insures those prime requisites of a school, pure air and the absence of noise. The extensive grounds are entered by a winding drive, which leads through beautiful forest trees to the college. In front of the building is a smooth lawn brightened by tasteful flower beds. In the rear are fine fruit orchards and a large vineyard of choice grapes, which are freely used by the college inmates. The accommodations for the reception of students are exceptionally ample. The first and second terms of this collegiate year begin on September 10th, 1879, and February 2nd, 1880, respectively, with a vacation for the Christmas holidays from December 19th until January 7th, allowing pupils from a distance sufficient time to visit their homes and return in time for the prompt resumption of their studies. The College has won for itself a wide and well-earned reputation throughout this and many States, and there can be no doubt that under its present able management it will in the future, as in the past, abundantly justify the pride with which its graduates everywhere speak of their *alma mater*.

F. COOK,—Manufacturer of Cigars, etc., 43 Washington St.

This establishment is well and ably conducted and worthy of liberal patronage. Mr. F. Cook manufactures the choicest brands of Cigars and deals in Tobacco, Snuff and Smokers' Articles generally. His Cigars are made from the best leaf tobacco, and in all cases guaranteed to be as represented. Orders will receive prompt attention. Remember No. 43 Washington street.

EDWARD M. BUTZ,—Architect, 114 Federal St.,
First National Bank Building, Allegheny City.

In the compilation of a work of this character, we include historical matter and facts regarding the present resources, institutions, &c., of the sister cities and their environs, and embrace an interesting notice of a number of our fine public and private buildings. Every one admires a handsome, well-proportioned building, and when standing before such an one, as the Dollar Savings Bank Building on Fourth Av., or Dr. Hostetter's Block on the same thoroughfare, and buildings of this class (of which we have many), with their grand solidity, fine proportion, and in every respect perfect architectural design, in proportion to the effect of their commanding appearance upon us, our curiosity is awakened to know who furnished the plans after which they were erected. In the instances above mentioned, it is apparent to every observer that none but one possessing the highest ability in his profession could bring forth such magnificent results. In these cases and the following that we shall mention, such talent and superior ability was found in the person of Edward M. Butz, Esq., of Allegheny City. This eminent architect perhaps has, during the past eight or nine years, designed a larger number of prominent buildings in the two cities than any three others in this line of business. We may note among the Pittsburgh list the Dollar Savings Bank Building, Seventh-Avenue Hotel, Hostetter's Block, Second National Bank Building, S. Ewart & Co.'s Store Buildings, Reineman's Hotel, Reymers Bros.' Store, blocks of D. Gregg & Son, and of John B. Thompson on Wood St., John Daub's building, Smithfield St., the German Evangelical Protestant and Seventh U. P. churches, the Sterrett Sub-District Public School, etc. In Allegheny City, the Memorial Hall, Western Theological Seminary, the First National and Franklin Savings Bank Buildings, C. C. Boyce's Block, Second Ward Public-School Building, C. Wattlely & Co.'s stores, the Trinity Lutheran and Central Presbyterian churches, a large number of the fire-engine houses, and the handsome residences of J. W. Dalsell, Esq., H. Sellers McKee and D. M. Long, and a long list of others equally prominent. In other cities Mr. Butz has become well known in connection with his drawings for the Wicomico county court house, at Salisbury, Md.; Lawrence county jail, at Newcastles, Pa.; Millvale public school, Millvale, Pa.; St. Peter's Reform Church, St. Petersburg, Pa.; St. Patrick's R. C. Church, Sugar Creek, Pa.; also, residences of S. D. Karns, Esq., Garver's Ferry, Pa.; R. H. Woodburn, Franklin, Pa.; J. B. Longnecker, Towson, Md.; and others in various other localities. In furnishing designs and specifications for State buildings he has achieved a position that only merit and capacity can command. The series of splendid structures at Morgantown, Pa., used as the Pennsylvania Reform School Buildings, mention of which is made in the leading editorial of this work, were designed and drawn by him; and last, but not least (quite the reverse in fact), the proposed new Western Pennsylvania Penitentiary plans and designs are just completed by him. These two last-named buildings may be said to "tax a man's caliber" and fully demonstrate the abilities of the man who can carry them successfully through, as well as the discretion of the State authorities in their appreciation of a high standard of professional requirements.

ROBT. C. PATTERSON & BRO.—Florists, 43 Sixth St.

Among the fine establishments in this city engaged in the floral business is that of R. C. Patterson & Bro., at 43 Sixth street; the business is exclusively in cut flowers. The trade in flowers in this city is a large and growing one, and rarer varieties of both cut flowers and plants are always kept in advance of the supply. This establishment is designed to administer to the growing taste of the people in this direction and to supply the finest and rarest flowers arranged in bouquets or baskets, and the various beautiful designs in which the Messrs. Patterson are ingeniously devising new and original forms and patterns. In their beautiful room on Sixth street every description of basket and designs are presented; no more attractive or recherche display is to be found in the city. They are daily in receipt of supplies of rarest exotics from Boston, New York, Philadelphia and elsewhere, in addition to the supply received from their splendid glass structures at Roup's Station, on P. R. R., which is but a few minutes' ride from their office. They have superior facilities for the growth of flowers and bedding plants, and the demand for the finer varieties of bedding and ornamental plants is always equal to the capacity of their houses to supply orders frequently coming from a distance. This firm was organized in its present form in 1878, being the outgrowth of an establishment started some years ago with which Mr. R. C. Patterson was associated. Mr. R. C. Patterson is a native of Pittsburgh, a young gentleman well known and esteemed; early in life he learned the profession of civil engineering, following it for some time, and in his present business he finds his engineering knowledge of practical benefit, and as a landscape gardener he has no superior. Mr. Nat. Patterson is also a native of Pittsburgh, and since the close of his college days has been engaged in the flower business as a floral artist, and during the six years he has followed that occupation in different places and cities he has acquired eminent skill.

JOSEPH J. ALAND,—Merchant Tailor & Dealer in Furnishing Goods, 424 Penn Av

Mr. Aland, the subject of this notice, stands high in this section as an artistic and fashionable Merchant Tailor. The establishment now conducted by him, was founded eighteen years ago, by Mr. Wm. Aland, his brother, in the same ward, and by him successfully carried on until four years ago, when the present proprietor assumed the management. He occupies the three-story brick building, 25x110, at No. 424 Penn. avenue, carrying a full stock of fine Foreign and Domestic Piece Goods, and Gentlemen's Furnishing Goods, in great variety and of the most desirable styles. His Merchant Tailoring Department is the main feature of his business, and his suits, ranging in price from \$15 to \$50, cannot be excelled by any establishment in the two cities. His stock averages about \$5,000, and his annual sales will exceed \$12,000. Mr. Aland is a practical and experienced cutter and attends personally to that department of his business, guaranteeing perfect fits and the most complete satisfaction. He employs regularly sixteen hands, and turns out only the very best garments, made in the most thoroughly workmanlike and fashionable styles. Mr. Aland was born in the Old Fifth, now Ninth Ward, and has always resided within its limits, and has a large circle of acquaintances throughout the two cities.

WM. H. MILLER,—Builder & Contractor, Cor. Sycamore & Washington Sts., 32 Wd.

Mr. Miller started into this business in 1870, and since then has been actively engaged and prominently known as one of the most reliable and skilled operators in this branch and well deserving public notice in a work devoted to the industries of this city. Mr. Miller has built many buildings in this district besides many outside of city limits. He is well prepared to fill all contracts made with him at very moderate rates, supplying the best of material and insuring the best workmanship which must give the fullest satisfaction to all; besides carpenter and builder he also does brick laying and plastering promptly, warranting first-class work.

A. F. MEYER,—Dealer in Dry Goods, Millinery, Notions, &c., St Clair St., 32 Ward.

Mr. Meyer started this business in 1875, previously a short time engaged in business on Sycamore street. He carries a full line of goods and doing quite a good business, being well and favorably known; his business keeps increasing and extending. He is at all times prepared to supply his patrons at the lowest cash prices, always having a good choice selection of dry goods, trimmings, millinery goods of all styles and variety. Mr. Meyer was born in this city in 1853 and will be found a courteous and agreeable gentleman.

A. KRUT,—*Wagon-Maker, 45 Fourteenth St., South Side.*

The works of Mr. Krut are situated at No. 45 Fourteenth street, South Side, and are quite extensive, the buildings being 60 feet square, two stories high and fitted with machinery of various kinds necessary in the business, which is driven by a fine engine. The forge and blacksmith shop is well arranged, affording abundant facilities for this class of work. He manufactures all descriptions of spring, peddler & coal wagons, timber wheels, drays, carts, wheelbarrows and a great variety of wood work; and in this branch of work there is no similar establishment in the city that enjoys a higher reputation for superior and first-class work. Orders for any kind of vehicles can be executed on short notice, and all kinds of repairing is also done in a very prompt manner. Mr. Krut owns one of the finest farms in Beaver county, this State, which he has brought to the highest state of improvement and on which he has planted large vineyards and orchards. On this farm all the most perfect agricultural machinery is to be found, a fine engine is employed to drive stationary machinery; he has erected a cider press which is operated by the engine. His enterprise manifested in an eminent degree. Mr. K. was born in the province of Alsace, France, in 1832, he came to this country in 1850, landed in New York city destitute of means; from there he worked his way to Buffalo, New York, where he remained some time, he afterwards came to this city on canal. After coming here he worked at journey work in different shops, among the number that of W. B. Ross. In 1863, having accumulated a small capital, he embarked in business on his own account, since then his honorable course has brought him abundant success and hosts of friends.

S. SCHNEIDER,—*Boots & Shoes, 1205 Carson St., South Side.*

Carson street, which is the main business thoroughfare of the South Side, boasts many mercantile houses which will compare favorably with similar establishments in any city in the Union. Among the leading boot and shoe houses on this side of the Monongahela may be mentioned that of S. Schneider, successor to Geo. A. Snyder, which is located at No. 1205 Carson street, between 12th and 13th streets. S. Schneider occupies a three-story brick building 20x50, and carries a full and complete stock of ladies', gentlemen's, misses' and children's boots and shoes of the best grades manufactured, selected expressly for this market, and offered at prices which defy competition. The stock is valued at between \$7,000 and \$8,000, and the annual sales will reach fully \$20,000, and doing business on a cash basis, buying for cash exclusively, and having the advantage of the market by that means at all times so that the patrons will reap the benefits by dealing with this establishment. S. Schneider devotes personal attention to the business and gives constant employment to four assistants in this extensive establishment. The trade is principally derived from the South Side and the adjacent suburbs. S. Schneider is a native of Germany and was born in 1827; has resided in Pittsburgh for the past thirty-nine years, during a great portion of which time having been actively engaged in mercantile pursuits, commencing business on the South Side in a smaller store near the present location, where the foundation of this prosperous and lucrative trade was laid and now carried on.

S. C. WILD,—*Dry Goods, Millinery, &c., Cor. Penn & Frankstown Aves.*

There are few industries of the city of Pittsburgh which this comprehensive work shall record, which require a higher and more refined taste in its operations than that of the general dry goods and millinery business; but the eminent success which has attended the establishment and conduct of this business by Mr. Wild since 1867, is a sufficient evidence of his thorough adaptation to its requirements. He first commenced this business in Allegheny, where he conducted it successfully until 1877, when he removed to his present location, corner of Penn and Frankstown avenues. This establishment occupies a room 20x40 feet in size and is kept constantly well stocked with seasonable and desirable dry goods, millinery goods, trimmings, hosiery and gloves, notions, &c. He carries a stock of not less than \$2,200, constantly replenished with fresh supplies, and is doing a successful trade. His stock of millinery goods must attract the attention of ladies, as it is supplied with the newest and most desirable in style and taste. Also dressmaking from latest fashion plates, regularly received, and at reasonable prices. He gives special attention to this department. Mr. S. C. Wild was born in Allegheny city in 1846; he has already had a large business experience and his trade in these important branches is constantly increasing.

S. McKEE & CO.—*Pennsylvania Glass Works, 13th St., South Side.*

Nearly half a century ago this celebrated plant was established under the existing style by Messrs. Samuel, Thomas and James McKee, who may properly be regarded as the pioneers in the manufacture of window glass in this city. In 1860 Mr. Samuel McKee became the sole proprietor of the business, being succeeded in 1877 by Daniel and C. J. McKee and A. C. Dravo, who form the individual members of the present company. The works of the firm cover an area of over 4 acres and are eligibly situated on the South Side. They are divided into various departments, embracing the two window glass factories, one bottle factory, flattening house, cutting rooms, store houses, blacksmith shop, engine rooms, pot room and grinding mill, all completely adapted for the manufacture of the special products of the firm by the introduction of the best machinery and most effective labor-saving appliances. The skilled employees engaged here will average from 200 to 250 men and boys, requiring a disbursement of over \$2,600 per week. In the manufacture of window glass, druggists' glassware, blackware, telegraphic insulators and insulators for lightning rods and similar wares, the products of S. McKee & Co. are universally considered as unsurpassed, a reputation so justly placed as to result in a trade extending over the whole United States. As conservators of the industrial thrift of the community and contributing to no small degree to the general prosperity as well as fostering the best interest of the highly important branch of manufactures in which they are engaged, the house of S. McKee & Co. is the object of a respect and honorable estimation to which its services and position are justly entitled.

A. PARSLOW,—*South Side Barrel Factory, 2320 Carey Alley, South Side,*

Manufacturer and Dealer in all kinds of new and second-hand Barrels, also Flour, Feed and Cement.

Among the industries of the city of Pittsburgh, we gladly present to the readers of this work Mr. A. Parslow, a gentleman whose enterprising spirit and native energy is rapidly building up a conspicuous and profitable business at No. 2320 Carey alley. Besides carrying on a quite extensive business manufacturing barrels, casks, kegs, &c., of every description, he also keeps a flour and feed store, and is prepared to supply the best flour in the market at lowest cash prices; also lime and cement. Mr. Parslow was born in England, in 1838, and came to this city in 1865, and has ever since been connected with the business of the city in some form. His present enterprise was commenced in 1870 with a comparatively small capital, but his indomitable perseverance, his high business qualifications and strait forward dealings have won him hosts of friends and given him a constantly growing and successful trade, which is located both in the city and country. He occupies large and ample rooms for both the manufacturing and general retail business, in both of which he employs several hands and assistants of practical experience and ability, always giving general satisfaction to all who favor him with their orders and patronage. Keeping a general supply of all articles in his line of business and is at all times prepared to fill orders promptly and make deliveries to all parts of the city. He gives special attention to all second-hand packages for pork houses, glass houses, also for fruit packages of all kinds and quantities, upon the shortest notice.

LEWIS. OLIVER & PHILLIPS,—Iron, Bolts & Heavy Hardware.

Office, Nos. 91, 92 and 93 Water St.

In connection with the iron trade of Pittsburgh and its influence upon the development and productive wealth of this community, it is but fair to assert that on this branch of our industries, the firm of Messrs. Lewis, Oliver & Phillips, has made an indelible impression. Established in 1863 by Wm. J. Lewis, Henry W. Oliver, Jr., and John Phillips, and in 1866 enlarged by the admission of Messrs. D. B. and Jas. B. Oliver, the efforts of the firm were at first directed to the manufacture mainly of Bolts, Nuts and certain lines of Heavy Hardware. It cannot be denied that in each subdivision of the labor the ability employed was of no ordinary character, as partially evinced by the prodigious success that attended the enterprise from its very inception.

The business from the first increased with rapid strides, and the consumption of iron became so great that in 1866 the erection of a rolling mill to supply the growing demand for iron of certain qualities and shapes became almost essential to the continued prosperity of the firm. With this addition to their resources there were left but few successful competitors to Lewis, Oliver & Phillips in those special branches of manufacture to which their attention was directed, and from that time the firm assumed a position the advantages of which have been since sedulously maintained and constantly enhanced. Some idea of the present status and usefulness of the house may be gained from the fact that its plant consists of thirteen buildings, mainly of brick, with iron frames and roofs, used as rolling mills, machine shops, bolt factories, foundries, etc., engaging the labor of 1,600 men and boys, most of whom are skilled artisans, and making requisite a monthly disbursement of \$65,000 to this source alone. Part of the machinery, which is operated by 19 steam engines and 21 boilers, aggregating over 1,000-horse power, consists of 100 bolt machines, 20 nut machines, 10 hammers, 108 varied miscellaneous pieces of mechanism for special work and 25 punching machines, besides all the vast and costly apparatus for boiler-making and rolling iron, most of which is of the latest and most approved character.

The works of the firm may be said to be in two sections, one entitled the Upper Mills being located upon the south side of the Monongahela River, opposite the old city, and the other, called the Lower Mills, on the Ohio River in Allegheny City, having sidings and tracks which connect directly with the P., Ft. W. & C. R. R. and P. & C. R. R.; the Upper Mills having side tracks running in from the newly-built P. & L. E. R., both establishments in all embracing an area of about 80 acres.

The specialties alone manufactured in these works number over 100, upon many of which the house has secured letters-patent, both in the articles themselves and the appliances by which they are constructed. This list includes all kinds of hardware for wagons, plows and agricultural implements, 15 different grades of chain, hinges, rings, bolts, screws, fire-irons, steel and iron wire, rods, crow-bars of iron and steel, fence-pickets, washers, blacksmiths' sledges, stone-hammers, etc., etc., together with and almost endless variety of other wares, celebrated for excellence and adaptability, wherever the trade of the house extends, which means every State in the Union.

Perhaps no men in this city have done more to increase the reputation of Pittsburgh as a manufacturing and mechanic centre than Messrs. Lewis, Oliver and Phillips. As a firm, that of Messrs. Lewis, Oliver & Phillips is too well and widely known by its brilliant career and untarnished repute to require any commendation here. Its work, enterprise and general usefulness speak for it in terms sufficiently expressive and entitle it to the esteem and consideration of that community to whose prosperity its labors have been so highly conducive.

PHILLIPS, NIMICK & CO.—Sligo Iron Mills,

Office and Mills, South Side below Monongahela Bridge.

In reviewing the great iron interests of Pittsburgh as developed in the various enterprises for the conversion and manufacture of this important staple, it will be particularly observed that in each separate concern some specialty is selected, to the production of which in its highest perfection the best energies of the establishment are directed. The widely known house of Phillips, Nimick & Co. is by no means an exception to this rule, as in the manufacture of certain brands of iron possessing marked properties, the celebrity of the firm and its business mainly depends. The plant now owned by the company was established over half a century ago by John Lyon and Robert T. Stewart, who were succeeded in 1828 by Barnet, Shorb & Co., who continued the business until 1851, when it passed into the hands of Lyon, Shorb & Co., the existing firm acquiring possession in 1873. The works are very extensive, ranking among the largest in the State, and occupy an area of several acres, being divided into several departments for puddling, forging, rolling, storing etc. Among the appliances and machinery in use are 25 puddling furnaces, 10 heating furnaces, eight steam engines with 14 boilers in four separate batteries, three steam hammers, one of which is the largest and most powerful in the city, having a twelve ton blow, and other machinery for flanging boiler heads and flue holes, upon which the firm hold exclusive rights and letters patent, having no competitors in this specialty in this country. These flanged boiler heads and flue holes are made by machinery that greatly increases the strength of the flange in all its parts by a rolling or staying-up process instead of bending, giving equal if not greater strength to that portion of the head where it is curved, and imparting a toughness and tenacity of the highest order a second advantage, added to the first—the use of the sligo iron. The perfection of the process is due to the original quality of the material as well as the mechanism employed, which as before stated is owned solely by this firm, and is the most perfect for the purpose that can be devised.

Two hundred and fifty men are employed in these works, and the consumption of coal alone will average from 50 to 75,000 bushels per month. The Sligo and Tyrone brands of iron made by Phillips, Nimick & Co., are noted for toughness, malleability and tensile strength in these properties fully rivaling the best production of the Norwegian and Swedish mills. With an increasing trade that already extends from Nova Scotia to the Sandwich Islands, and a home demand especially for flanged iron work that rapidly augments. The firm of Messrs. Phillips, Nimick & Co. has achieved not only a prosperity to which it is amply entitled, but a position and standing in the manufacturing community that reflects the highest credit upon the firm itself and adds as well to the repute of Pittsburgh as a productive centre.

JOSEPH FITZPATRICK,—Groceries & Produce, Cor. Wylie Av. & Arthur St.

This business was started by Mr. Fitzpatrick in 1874. He carries a general assortment of choice groceries and produce of all kinds, such as flour, sugar, teas, spices, coffee, canned goods of all kinds besides fruits and vegetables and all other goods generally found in a family grocery store. Mr. Fitzpatrick does a very fair annual business, he was born in this city in 1853 and began business at an early age. He is an enterprising business man such as there are few in this city. He occupies a building 20x54 feet, employing extra help besides himself and at all times fully prepared to serve all who favor him with their patronage, always aims to sell as low as the lowest and keeps the best goods in the market.

G. M. KELLY, M. D.—Physician, 181 Wylie Av.

Dr. George M. Kelly is a native of Claysville, Washington county, Pa., where he was born February 11th, 1854. He graduated with high honors at the Jefferson College, Philadelphia, and commenced the practice of his profession at Washington, Pa. In 1875 and 1876 he occupied the responsible position of resident physician at Mercy Hospital, in this city, and since that time has been practicing medicine with marked success in this city. His office is located at No. 181 Wylie avenue, and his office hours are from 9 to 11 A. M., 2 to 4 P. M., and 7 to 9 P. M.

FIRST NATIONAL BANK OF ALLEGHENY,—114 Federal St.

Among the fiduciary institutions of Allegheny City, the First National Bank doubtless commands the largest line of deposits and does the most extensive discounting business. This Bank was incorporated under the National Bank act in 1864, with a capital stock of \$350,000, and during its entire career has been regarded as one of the best-managed monetary concerns in the country. Upon its organization it was appointed a United States Depository for the 23d U. S. Revenue District, a trust which it still retains, and so successfully have the affairs been managed, that, after paying a yearly dividend to the stockholders of 10 per cent., they still have a surplus of \$110,000 and one of the finest banking houses in the State. This structure, designed by and built under the supervision of the eminent architect, E. M. Butz, Esq., who occupies the front rooms of the second story, over the banking room, for his offices and drawing rooms, is of three stories and basement, and was erected in 1877 at an expenditure (including lot) of \$81,000—is fire-proof throughout, and is considered unsurpassed in its appointments, with chronometer locks, &c., by any similar structure in either of the two cities. The officers and directors of this corporation are of the most substantial business men of the community, and are as follows: T. H. Nevin, Esq., Pres't, who is also one of the Board of Directors with C. C. Boyle, J. B. Smith, John Thompson, William Harbaugh, James McCutcheon, James B. Orr, George W. Cochran and Edward Groetzinger. The Cashier, E. R. Kramer, Esq., has filled this position with marked ability since his succession to Mr. J. P. Kramer in 1878, and is assisted by the following staff: Wilson Miller, Teller; A. B. Nevin, Assistant Teller; John D. Kramer, General Bookkeeper; Thomas G. Christie, Individual Bookkeeper; T. H. Nevin, Jr., Collection Clerk; W. H. Casady, Messenger; while Eastern and Foreign exchanges are made through the Third National and National Park Banks of New York, and the First National Bank of Philadelphia; conducting a legitimate banking business in deposits, discounts, collections and exchanges.

W. H. IRWIN,—Rosedale Foundry, Steel Molds, Hammer Dies, Furnaces.

Office, No. 187 Liberty St.

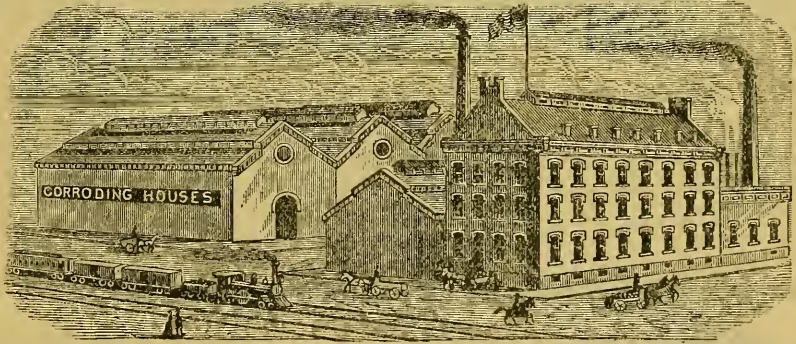
In connection with a detailed account of the industries of Pittsburgh, particularly those that are allied to its great staple manufactures, the enterprise of Mr. W. H. Irwin, in the work of Founding, Casting, and the construction of the celebrated Pittsburgh hot-air, rolling-mill and machine-castings Furnace, should not be overlooked. The business was established in 1865 by Messrs. L. Peterson, Jr., and the present proprietor, under the style of L. Peterson, Jr., & Co., which so continued till 1878, when, by the withdrawal of the senior partner and the purchase of his interest, the entire control became vested in Mr. Irwin. The plant is a very extensive and valuable one. Situated in the lower part of Allegheny City, on the bank of the Ohio river and line of the Pittsburgh and Cleveland Railroad, it embraces about 2½ acres, the buildings covering nearly half that area. Thoroughly supplied with all the best modern machinery and improved appliances, the works are noted for the excellence of their products in large and small railroad and rolling-mill Castings, Steel Molds, Hammer Dies, and special work in this direction of every description. Of the Pittsburgh Furnace it is justly remarked and may be safely asserted that it combines in itself more solid and substantial merits than any other similar apparatus known; perfectly effective in use, free from dust or smoke, simple and economic in structure, with arrangements for combustion that permit of the employment of any fuel, from wood or hard coal to bituminous dust or coke. The encomiums passed upon this invention by those who have enjoyed its benefits and conveniences for years, would fill several pages of this volume and embrace the names of many of the most prominent citizens. The business of the concern, which is confined mostly to this specialty, under past conditions has ranged over \$100,000 per annum, and at present low prices will average between \$80,000 and \$90,000. About 70 skilled artisans are employed at the works, and one 20 horse-power engine, requiring a monthly outlay of \$2,500. Mr. Irwin is a native of Allegheny City, and, after returning from an arduous and eventful career as an officer in the Union army during the late war, he engaged in the present enterprise, with which he has since been identified in such a way as to conduce not only to the general industrial thrift, but the achievement of a high position among those interests for which Pittsburgh is most celebrated.

DAVIS, CHAMBERS & CO.—White and Red Lead, Litharge, Colors, &c., &c.

Works, 45th and 46th Sts. and A. V. R. E.; Office, No. 167 First Av.

One of the most extensive establishments in this city or the United States, engaged in the manufacture of White Lead and its contingent products, is that of Messrs. Davis, Chambers & Co., and as such should receive more than brief consideration in this work. The prime object to which the attention of this firm was directed, after its formation in 1866, was the production of goods that should be en-

tirely free from adulteration, and it is not too much to assert that their efforts have been attended by the most satisfactory results. On every keg of White Lead turned out by this concern is branded the analysis of its contents—91 parts pure Lead and 9 parts Linseed Oil—and an accompanying offer of \$25 in gold to any one disproving the truth of this statement. The general recognition of the superiority of the goods manufactured by this house led to the rapid increase of its trade, capacity and resources—the plant, which is located on 45th and 46th Sts., comparing favorably in size and every requisite appointment with any similar establishment in the country, over the whole of which, and largely in the Southern States, the business is transacted. A large force of hands is employed by the firm in the various operative departments of the work, from the corroding beds to the packing room; the total product being equal to any house in the country, which consists of White, Red and Potters' Lead, Litharge, Putty, Colors, and strictly pure Paints, an increasing demand for which has augmented this branch of the business and given it the character of a specialty. The individual members of the concern are Geo. C. Davis, B. Preston and John S. Davis, who do business under the original firm name, though Mr. Chambers has been deceased for some years. So far as the advantages offered to the trade by this house are concerned, it may be stated that they are as liberal and desirable as those offered by any competitor in the country, while the inferences in favor of the quality of their goods being vastly superior are very strong and should weigh greatly in their favor. The policy upon which the trade is conducted is an enterprising and honorable one, and in achieving the prosperity that marks its present condition, the firm has not neglected those principles which entitle it to the just esteem of the community.



EMPIRE OIL WORKS,—D. P. Reighard, Cor. of 9th Av. and Duquesne Way.

From its advantages of location Pittsburgh is undoubtedly the natural refining point for the immense quantities of petroleum produced in Western Pennsylvania, and the value of the products of her refineries to-day constitutes an immense item in the general sum total of her commerce. Among the many establishments engaged in this line of business, the Empire Oil Works of Mr. D. P. Reighard are deserving of a prominent position. Established in 1865, upon a moderate scale and with a limited capital, the business has increased until the works now cover over six acres of ground near the Sharpsburg bridge, on the line of the A. V. R. R., with eight engines for pumping, and furnishing employment to about thirty hands. The business amounts annually to a very large sum and extends over every portion of the United States. Mr. Reighard was born in Pennsylvania in 1844 and now ranks as one of the principal refiners of the country. He manufactures as a specialty for illuminating purposes the widely-known snow-white Astraline, with a burning test of 150°, and the Head Light Oil, water white, of the same test, both of which articles stand very high in the market and command a ready sale. He also manufactures Standard White Refined Petroleum, 110° test, and Lubricating, Paraffine and Machinery Oil of superior grades and excellence.

ROBINSON BROS.—Bankers, No. 75 Fourth Av.

This widely and well-known house was established in 1858, under the style of Robinson, McClean & Co., was succeeded in 1861 by the present firm, composed of the brothers J. F., Wm. A., and David Robinson. These gentlemen are natives of Erie County, Pa., but for thirty years have been residents of this city and favorably identified with the financial interests of the community. While engaged in a general banking business of discount and deposit, the special operations of the firm consist in the purchase, sale and negotiation of bonds, stocks, mortgages and other transferable securities, upon a commission basis. By immediate telegraphic connection with the New York and Philadelphia stock markets, every advantage is afforded investors or operators, while the excellent standing of the house is a guarantee that every matter entrusted to it will receive prompt attention. It is not the province of this work to deal in laudation, but it may be properly as well as justly asserted that, as an honorable, reliable and enterprising firm, that of Robinson Bros. has few compeers in this or any other community.

R. B. WARD,—London Bakery, &c., Cor. Penn Av. and P. R. R., East End.

This gentleman, who succeeded Keehin Bros. in 1878, began business with a capital of \$400. This moderate investment has risen to \$1,500 and bids fair to be further increased with the increasing patronage received by Mr. Ward. His annual sales mount up to \$7,000. The establishment embraces a Store and Bakery where four hands are employed. The pay-roll is about \$150 monthly. Mr. Ward employs one salesman. The excellent quality of Ward's London Bread finds it a ready market in every part of the city and none has a greater popularity. He employs only first-class workmen and uses nothing but the best material. Mr. Ward was born in the city of New York in 1852 and came to this city in 1856. He was in the grocery business three years before opening in the East End. He is a very energetic man of business and popular with all classes.

CHAS. GARDNER,—Merchant Tailor, No. 19 Federal St., Allegheny.

With an experience of twenty-two years in the Merchant Tailoring business, Mr. Chas. Gardner, of No. 19 Federal street, Allegheny, possesses many advantages which cannot fail to commend his establishment to favorable notice. His salesrooms are located in the commodious brick structure, 20x120 feet, near the suspension bridge, and his stock comprises a fine and judiciously selected assortment of foreign and domestic fabrics for gentlemen's wear, from which customers may select. He makes to order, in the best style, elegant suits, at prices ranging from \$14 to \$40. He also carries a line of Custom-made Clothing, from which serviceable suits may be procured from \$4.50 to \$20. He carries a stock valued at about \$3,000 and employs eight hands at an average weekly expense of \$80. Although he has only occupied his present quarters since March 3, 1879, his trade has been large and satisfactory and his prospects most encouraging. Mr. Gardner is a native of Germany and was born in 1836. He learned his trade in the old country, but has for many years resided in the United States.

WM. HOSACK,—Flour, Oats, &c., Wholesale & Retail. Cor. 34th St. & Penn Av.

Will be found at the corner of 34th street and Penn avenue, where he keeps an extensive stock of feed, etc., of all descriptions and does a very large business. The business was started by Mr. Hosack in 1876, since then he has enlarged his stock as business demanded, buying exclusively for cash, thus securing lowest rates. Mr. H. was born in Allegheny City in 1830 and has lived in this city ever since; he first began life as a butcher and continued in that occupation a number of years. Served the city in the capacity of Street Commissioner seven years, was meat inspector of Allegheny City the first year after that office was created; shortly after leaving that position engaged in present business, in which he is now doing a prosperous business. He takes a prominent part in political affairs and wields a large influence in his section. His experience as proprietor of a race course we shall have to omit for want of room.

M. J. DOUGHERTY,—Cigar Manufacturer, 434 Penn Av.



The accompanying "Trade Mark," the exclusive property of Mr. M. J. Dougherty, of No. 434 Penn avenue, has become familiar to the readers of local and class papers from Maine to California, and the Little Builder Cigars are smoked to-day in every State in the Union and in the camps of the Regular Army on the plains, and by the officers of the Navy on every sea. Mr. Dougherty, who is an enterprising, energetic and pushing young man, has advertised this specialty of his extensively, and as a result has received orders from all sections of the country. Where they have once been introduced and tested they have never failed to advertise themselves, and his trade is constantly increasing. The "Little Builders" are made from the best quality of leaf tobacco, are neatly put up and sent by mail or express to any part of the country at the very low price of \$2 per hundred or \$16 per thousand, by express—\$20 per thousand by mail. In addition to this favorite cigar, Mr. Dougherty manufactures a variety of other popular brands, at prices ranging from \$10.50 to \$30 per thousand. He commenced business at his present stand Aug. 4, 1874, on a comparatively small scale, and since that time his trade has been steadily increasing. He is a practical cigar maker and employs four experienced assistants, turning out not less than 350,000 cigars annually. He also carries in stock a full line of Fine Cigars, both imported and of his own make, and Manufactured Tobacco and Smokers' Articles of every description, transacting a flourishing wholesale and retail business throughout the two cities and adjoining towns. Mr. Dougherty is a native of Pittsburgh, born on Penn street in 1845. He is a wide-awake and enterprising gentleman and is deserving of the success which he has attained in his business career.

PIER, DANNALS & CO.—*Brewers of Ale, Porter, Lager Beer. Stephenson St.*

There is perhaps no branch of business outside of her great specialties of steel, iron and glass, which has contributed so largely to the wide-spread reputation of Pittsburgh, which has given her a greater national celebrity, than that of her extensive ale and porter breweries, prominent among which is the house of Pier, Dannals & Co. Pittsburgh ales have for many years enjoyed the highest reputation and met with ready sales in almost every portion of the United States, and the trade-mark of the "Oregon Brewery" has everywhere been accepted as a guarantee of superior excellence. During the past few years, however, the "national beverage" of the "Faderland" has become so universally popular as to supersede, to a certain extent, the use of ale, and the leading brewers have succumbed to the inevitable and completed arrangements to supply the demand at home. With that enterprise and far-sightedness which has ever characterized the operations of this well-known firm, Messrs. Pier, Dannals & Co. were the first to inaugurate the "new departure" and commence the manufacture of a superior quality of Lager Beer, which, though but recently introduced, has already acquired a reputation which bids fair to equal that which for the past twelve years has been awarded to their ales throughout the United States. This house was established in 1867 in the Ale Brewing business, the firm at that time purchasing the establishment on Stephenson street previously owned by D. Fawcett & Co. The building, which was originally constructed for the manufacture of white lead, was subsequently sold to Rhodes & Verner, who converted it into an ale brewery and then disposed of their interest to Messrs. Fawcett & Co., the immediate predecessors of the present proprietors. The original structure was a three-story brick building, fronting on Stephenson street 130 feet and extending back to an alley 130 feet. The present owners have erected an addition 50x50 feet, on the corner of Stephenson and Forbes streets, thus making their buildings cover nearly a half square. The malting and brewing departments are supplied with the best and latest improved machinery of every description required in the business, with a twenty-horse power engine and the necessary boilers and appliances. Twenty-five hands are employed, with a weekly pay-roll aggregating about \$350. The amount of capital originally invested in the business by the present proprietors was \$30,000, which has been increased to \$100,000. They carry an average stock of not less than 3,000 barrels of beer and 1,000 of ale and their annual sales in past years have averaged about \$100,000. With their increased facilities and the introduction of Lager Beer brewing, they will undoubtedly largely exceed that amount. Their buildings, vaults and cellars are admirably adapted to the successful prosecution of the new business in which they have embarked and they have decided to spare no pains or expense to produce the best beer in the country. With this end in view, they have secured the services of an experienced practical beer brewer from Milwaukee, who was formerly connected with the famous brewery of Philip Best, in that city, and as they use only the very best material, there seems to be no valid reason why Pier, Dannals & Co.'s beer should not, like their ale, become noted as the very best made in this country. The members of the firm are E. W. Pier, H. F. Dannals and W. S. Pier. Mr. F. Uhlman has charge of the offices, books and clerical force at the brewery, and Mr. John W. Carle represents the house as salesman in the city and throughout the adjoining counties. The firm is to be congratulated upon securing the services of two such competent and able assistants.

JOHN G. BRANT,—*Leather, Hides, &c., 329 Liberty St.*

Under various changes of style and firm this well known house has been in existence for more than twenty years, during which period it has always maintained a prominent position among the representative business houses of the Iron City. The present proprietor, Mr. John G. Brant, is the immediate successor of John Hammett & Son, and commenced in his own name in 1875. He had previously been connected for four years with the well known house of G. N. Hofstätt, and has the advantages of an experience of over seventeen years in this particular line of business. His extensive tannery is located at Steward Station, on the Baltimore & Ohio Railroad, and has a capacity for tanning 200 hides per month. He manufactures a superior quality of oak tanned harness and bridle leather, fair skirting, shoe splits, &c., and is a general dealer in all kinds of leather, hides, oils, tallow, sumac, lace leather, shoe findings, &c. His office and salesrooms are located in the commodious four-story brick business structure 24x110, at No. 329 Liberty st., and his average stock of the various articles above enumerated is estimated at from \$10,000 to \$13,000. He employs ten hands regularly at a weekly expense of about \$100, and his trade which extends throughout the Eastern and Western States and in some of the Southern States reaches \$60,000 to \$80,000 per annum and is steadily increasing. The reputation of the leather produced in Pittsburgh extends over the entire Union and even to foreign lands. Mr. Brant is a native of Pittsburgh, and was born in 1847; he has been identified with the business in which he is now engaged for many years and is thoroughly conversant with all its details.

MILLER & HOUSTON,—*Groceries and Provisions, cor. 48th & Butler Sts.*

At the corner of 48th and Butler sts., in a handsome and well located and arranged store room, piled up with a large, varied and superior stock of Groceries, Teas, Provisions, etc., of the finest quality, will be found the firm of Miller & Houston, where they are doing a rushing business of about \$25,000 per annum. They started in this location in 1878, buying out Mr. Riley, who had previously conducted the business at this point. After getting possession these young gentlemen enlarged the stock, pushed the business with the greatest energy, rapidly running it up to its present very handsome proportions. Mr. Miller was born on the South Side, Pittsburgh, in 1857, entered the grocery business as a clerk when but 13 years old, and has continued in it ever since, succeeding by his own frugality and industry. At the age of 22 years he is among the most successful retail grocers. Mr. Houston, who is about the same age as Mr. Miller, was born in Kittanning, Pa., in 1856, and came to Pittsburgh 7 years ago, was in the employ of Castle Shannon R. R. a number of years previously to engaging in his present business, having prudently saved his earnings, which he united to those of Mr. Miller, and embarked in their present business, in which they have achieved so remarkable and notable a success of which they are every way worthy and deserving, having accomplished it by their unaided and well directed efforts.

PENN BANK,—*Corner of Wood and Liberty Sts.*

Among the institutions of a fiduciary character in this city, the Penn Bank, though established only in 1873, has obtained a foothold and standing in the commercial community that ranks it with the oldest and most solvent concerns in the Iron city. Upon its organization Hon. Jas. H. Hopkins became the presiding officer, a position which he continues to fill with marked ability. Mr. Hopkins, as a member of the legal profession, occupies a position to which few ever attain, as the result of solid acquirements and an untarnished career. His late representation of this district in Congress was a splendid endorsement of the wisdom of those who secured his election. Mr. W. N. Riddle, the cashier, has also been identified with the bank since its inception and has established a well deserved reputation for financial capacity of a high order. The following gentlemen are efficient aids in the conduct of the business in their respective departments:—G. L. Reiber, Teller; Thos. S. Gordon, General Book-keeper; Wm. H. D. Barr, Individual Book-keeper; Wm. D. Frew, Corresponding Clerk; Wm. Hutchison, Collection Clerk, and James Hutchison, Messenger. The Directors being:—Jacob H. Walter, Samuel Severance, James Herdman, D. W. C. Carroll, F. B. Laughlin, T. B. Swearingen, Geo. C. Davis, Alex. Reynolds, Philip Reymer, Thomas Hare, F. Rahm, John Hall, W. S. Marshall. The Penn Bank is incorporated under the State laws, with a capital of \$250,000, while a rapidly increasing business and ever unshaken repute conduce no little to its prosperity.

JAMES McCLURG & CO.—Cracker Bakers & Confectioners,*187 Rebecca St., Allegheny.*

In a historical review of the manufacturing and business interests of the two cities, the establishment of James McClurg & Co., Cracker Bakers and Confectioners, whose office, warehouses and manufactory are located at Nos. 187 Rebecca street, and 10 & 12 Walker street, Allegheny City, is deserving of especial mention and a prominent position. This business was established in 1870 by Mr. James McClurg, the present senior partner of the firm, with a small capital and on a comparatively moderate scale, but owing to the steady and gratifying increase in business he was compelled to enlarge his facilities and new members were admitted to the firm, the present proprietors being Mr. James McClurg, Mr. Thos. R. Herd, Mr. John McClurg and Mr. Aaron McClurg. Their office and salesroom at No. 187 Rebecca street is a three-story brick building 20x75 feet, which is stocked with a large and complete assortment of crackers in every variety and style, Cakes, Snaps, Biscuit and fancy articles pertaining to their line, fine confectionery, &c. They are also extensive manufacturers and dealers in prepared flour, an article highly recommended by dealers and consumers for griddle cakes, sugar cakes, waffles, &c. Their factory at Nos. 10 & 12 Walker street, is a three-story brick structure 60x100 feet, fitted up with all the requisite machinery for carrying on their extensive business. They employ one thirty-horse power engine, two cracker machines, one snap machine, two soft dough machines and other smaller machines and appliances of the most approved patterns. They have two large reel ovens, one of which is the largest used in the business in the United States. The entire establishment is fitted up in a most thorough and complete manner and will compare favorably with any similar establishment in the country. They employ thirty hands at a weekly expense of about \$300. The amount of capital invested in the business is \$50,000 and the average value of stock carried by the firm is about \$25,000. Their trade extends throughout the two cities, Western Pennsylvania, Eastern Ohio and West Virginia, and will reach \$100,000 per annum. The reputation of the various articles manufactured by this well known house is now well established and their trade is constantly increasing. Mr. James McClurg and Mr. John McClurg were born in Ireland and Mr. J. R. Herd and Mr. Aaron McClurg are natives of Pennsylvania. All the members of the firm are energetic and active business men, thoroughly conversant with the business in which they are engaged, and stand high in the mercantile community.

DAVID GRIM,—Carriage Manufacturer, Cor. 32d St. and Penn Av.

This enterprising manufacturer commenced business at his present stand in 1874. His capital was small, but he had, what is often much better, industry and skill. As the result he has now generally on hand, of his own manufacture, a stock of \$7,000. He constantly employs 8 or 10 hands, and his work finds a ready and profitable market in Pittsburgh and the adjacent neighborhood. His shop, buildings and grounds occupy a space of 96 by 100 feet. He makes the manufacture of Rockaways and Buggies a specialty. Indeed, all the work turned out by Mr. Grim is of the best quality, and no articles of inferior manufacture are found at his establishment. The superior hand-made work, including the several varieties of Rockaways and Buggies, fears no competition here or elsewhere. Cheap or flimsy work is unknown at this establishment, and consequently the business has scarcely felt the depression of the times. Mr. Grim was born in Beaver Co. Pa., in 1831, and, having learned the trade of a carriage-maker, passed a number of years as a journeyman in various establishments. He spent three years profitably in the shops of New Haven, Conn., and no less than six years in Tennessee. After the commencement of the war he came to Pittsburgh, and started in business. Mr. Grim next proceeded to assume the management of his growing business alone at his present location, and still continues to do so.

M. D. HOWLEY,—Dealer in Real Estate, Securities etc., Cor. 39th & Butler Sts.

This gentleman will be found at the above location, where he opened his office the 1st of Jan. 1879, and where he does a general Real Estate, Insurance, Collection and Broker business. Although but recently starting in his present location, Mr. Howley's genial qualities, known integrity, ability and experience in financial matters has already secured him a large business. Mr. Howley was born in Ireland in 1839, and came to the United States in 1853. He spent some years in the Western and Southern country, traveling through many sections of Missouri and Mississippi River country. He afterwards was induced to go to Canada and take charge of the large estates of his father, where his ability and energy was manifested in an eminent degree in placing the affairs of the large and complicated estates in perfect order. He came from there to this city in 1865, when he married and accepted a position in the 4th National Bank, remaining for 11 years, leaving there to engage in his present business, and to look after his large property interests. Mr. H. is a cultured and agreeable gentleman, and possesses the esteem of all who know him.

IRON CITY MARBLE WORKS,—Geo. Metcalfe, Butler St., near 45th.

The extensive Marble and Stone Works of Geo. Metcalfe are located on Butler st., near 45th st., where are manufactured and kept on sale Monuments, Tomb Stones, and Marble and Granite Stone Work of all kinds on a large scale, employing constantly 5 skilled workmen. Mr. Metcalfe carries a complete stock, not being excelled by any establishment in the city. These works were established by the father of the present proprietor in 1872, who had previously been engaged in the same business for 20 years in another locality, being a member of the old firm of Evans & Metcalfe. Mr. Metcalfe was born in Pittsburgh in 1856, and has lived here ever since, learning the business of marble and stone cutting with his father, working in the establishment ever since he was old enough to work. He has now taken the business in consequence of the death of his father. Mr. M. is fully qualified for carrying on the business in a successful manner, and to the entire satisfaction of the large number of patrons of the establishment.

D. J. POTZER,—Hats, Caps and Furnishing Goods, 23 Federal St., Allegheny.

Mr. Potzer has been engaged in his present line of business in Pittsburgh and Allegheny since 1851. He opened at his present location, No. 23 Federal street, in 1877, with a full line of Hats, Caps and Gents' Furnishing Goods, and his trade has been eminently satisfactory since that time. While he keeps a carefully selected stock of articles in his line, he makes a specialty of selling at reduced prices, and has established a wide spread reputation for selling at lower rates than any house in town. His sales-rooms are 20x110 feet, in the elegant four-story brick building, No. 23 Federal street, near Suspension bridge.

DR. J. M. STEVENSON,—Physician & Surgeon, Penn & Washington Av's., E. E.

Dr. Stevenson was born in Allegheny County December 30, 1836. He graduated at Jefferson Medical College, Philadelphia, in 1859. For thirteen years previous to settling in Pittsburgh he practiced with success in Westmoreland County, Pa. He removed to his present location in August, 1872, and has a large and steadily increasing practice amounting to not less than \$7,000 or \$8,000 per annum, in Pittsburgh and the East End Wards. His office is located at the corner of Penn and Washington avenues.

JOHN O'DOHERTY,—*Wholesale Wines & Liquors, 17 & 18 Water St., cor. Penn Av.*

One of the ancient landmarks of Pittsburgh is the old brick structure at the corner of Penn avenue and Water street, located upon historic ground, where in ante-Revolutionary times stood Forts Duquesne and Pitt and in the rear of which may to-day be seen the old buildings of quaint French architecture erected in 1764 by Col. Boquet as a portion of the fort. The old three-story brick structure, 90x10 feet, now occupied by Mr. O'Doherty as a Wholesale Wine and Liquor Store, was erected in 1810, and at that day was considered one of the most imposing business structures in the city. During the great flood of 1832 the water covered the first floor of this building to a depth of five feet and on several occasions the water has flooded a portion of the buildings. On the Water street front of this store is painted a record of the various "great floods" since its construction with marks showing the various stages of high water. Mr. Eichenbaum, now of the firm of Johnson & Co., printers, was the first occupant of this building, using it for the manufacture of mead, a light beverage at that time very popular in the city. Then it was occupied for a time by Mr. Garrett as a malt house. After this it remained idle for a number of years, and in 1870 Mr. M. Munhall and Mr. J. O'Doherty opened it as a Wholesale Liquor House and for nine years did a flourishing and lucrative business. In 1879 Mr. Munhall disposed of his interest in the business to Mr. O'Doherty, who has since been sole proprietor. This is one of the largest and best-known establishments of its kind in the city and Mr. O'Doherty carries continually in stock and in bond a full line of the choicest and purest brands of Foreign and Domestic Wines, Brandies, Gins, Rums, etc., and pure Old Monongahela Rye and Rectified Whiskies of the finest quality, valued at not less than \$70,000. His trade extends over the two cities and adjacent territory throughout Pennsylvania, New York, Ohio, Maryland, West Virginia, Illinois and many of the Western States, his annual sales amounting to not less than a quarter of a million dollars. This house is noted for the excellent quality of all articles pertaining to this line of business. Mr. O'Doherty is a gentleman of long experience in the business, having been the principal part of his life identified with the liquor trade, and dealers may at all times be assured that every article will be found exactly as represented.

F. HAMPE,—*Birmingham Bottling House, Head of 23d St., South Side.*

Manufacturer of Sarsaparilla, Raspberry, Lemon, Ginger Ale and Soda Water.

Notwithstanding the fact that there has of late been an increased demand for lager beer in this locality, the several beverages known as soft drinks, such as are manufactured by the establishment named above, are in great demand, and their preparation is a large and important branch of industry in this city. This house was started in 1869 by the Birmingham Bottling House Company, of which Mr. F. Hampe is manager and principal stockholder, the other stockholders being August Ammon, Esq., and Mr. Nusser. The business is now entirely controlled by Mr. Hampe, who has increased the facilities for working and the capacity of the works in order to keep pace with the times and meet the demands of the trade. In addition to the various soft drinks prepared and bottled at this concern, a specialty is made of bottling the best brands of beer for family use, which is delivered at any place desired in the two cities. A full stock is kept on hand of all goods in his line of trade and the yearly business is estimated at about \$15,000. Two buildings are occupied by the works, one a two-story brick structure, 40x60 feet. The business is divided into several departments, and all the latest improved machinery used for the purpose, including a 20-foot boiler, two copper generators, three copper fonts and a Blake pump. The trade is mostly local, being confined to the city and surrounding towns. Mr. Hampe was born in Germany and came to this country in 1857. Since then he has made it his home. He is a man of large acquaintance in business circles and his reputation as an upright business man is second to none in the city. A man of public spirit and enterprise, who takes a prominent position in all matters pertaining to the welfare of the community.

PITTSBURGH ACID WORKS,—*Sulphuric Acid, Office, No. 54 9th St.*

For nearly fifteen years Messrs. F. F. Farrar, G. B. Littlefield and C. W. Farrar have, under the above style, been engaged largely in the manufacture of Sulphuric Acid for commercial, manufacturing and chemical purposes. As one of the only four manufactories of this kind in the United States it is deserving of more than ordinary notice in this volume. The plant of the house is located at Sandy Creek, on the line of the Allegheny Valley R. R., the building being substantially built of brick, 28 feet from floor to ceiling, and covering an area of over one and one-third acres. The manufacture here of the acid is carried on upon an improved process, highly conducive to its perfection in the matter of strength and purity. All the necessary apparatus and machinery, together with one powerful engine, and several large steam pumps, are of the most approved kind, and 20 hands are engaged in the works. Since the commencement of operations the business has increased fully 100 per cent., most of the product finding a ready market in this city and immediate surroundings. In comparison with other contemporaneous establishments it compares most favorably, especially in regard to the quality of the article manufactured, which is said to be of superior excellence.

M. F. GARDNER,—*Family Groceries, 93 Chartiers St., Allegheny.*

Mr. Gardner is an active and wide-awake young man who has recently commenced business for himself at No. 93 Chartiers street, Allegheny City. He has been fortunate in his selection of a location and keeps only the best and most reliable goods, and has a liberal share of the patronage of this section. He occupies a two-story brick building, 18x38, and carries a full and complete stock of Choice Family Groceries, Teas and all articles usually found in an establishment of this kind. Mr. Gardner was born in Allegheny City in 1858 and has a large circle of acquaintances and friends who unite in wishing him success.

C. W. ROBERTS,—*Groceries and Provisions, No. 3808 Butler St.*

At the above location, in the midst of piles of Groceries, Provisions, etc., of the best quality, with his large store room, kept full of all the leading goods in his line, provisions, fruits, etc., in their season, the very popular and courteous gentleman, C. W. Roberts, will be found always busy serving the numerous customers. There is no establishment in this portion of the city more worthy of the liberal patronage of the community. He started the business in 1875 on a very small capital, but enterprise and business ability have increased his trade so that he now carries a stock of from \$2,000 to \$3,000, and does an annual business of from \$15,000 to \$20,000, which is constantly increasing. Mr. Roberts was born in the State of Maine, and came to this city in 1872, where he has resided ever since.

M. McSTEEN,—*Plumber, Brass Founder, Gas and Steam Fitter,*

Penn Av., bet. 32nd & 33rd Sts.

The establishment of Mr. McSteen is on Penn avenue, between 32d and 33d sts. Started 17 years ago by J. & M. McSteen, they going out of the business, it has since been continued by the present proprietor. A general Plumbing, Brass Foundry, Steam and Gas Fitting business is done, for which he is well prepared. Mr. McSteen was born in Ireland in 1818, came to the United States in 1836, worked 22 years in the well known Fulton's Brass and Bell Foundry. He was captain of the old Allegheny Volunteer Fire Company for a number of years, participating in many of the exciting incidents connected with that organization. Mr. V. McSteen, son of the proprietor, is an active politician, exerting much influence in his ward.

PITTSBURGH & LAKE ERIE R. R.

The Pittsburgh and Lake Erie Railroad is mainly indebted for its existence to the capitalists and business men of Pittsburgh, who, becoming dissatisfied with the freight discriminations of older and wealthier corporations against Pittsburgh, determined to construct a road which should furnish an outlet for their manufactures, and carry their productions at reasonable yet paying rates. This line is the exclusive connection of the Atlantic and Great Western, Lake Shore and Michigan Southern, New York Central, and Erie Railroads for passengers and freight to and from Pittsburgh, East and West, and offers to our manufacturers and business men competing facilities, which must be appreciated. The Pittsburgh and Lake Erie Railroad passes through a thickly settled portion of country, and presents to the traveler scenes of picturesque beauty and grandeur unexcelled in Pennsylvania and Ohio, and forms connections with leading trunk lines at various points. The advantages of this new route can scarcely be over-estimated in the facilities it presents to the manufacturers and shippers of Pittsburgh. At New Castle junction a branch, extending three miles, has been constructed to New Castle for the purpose of obtaining the business at that point, which is an item of no small importance. The tracks of the Pittsburgh and Lake Erie Road extend for five miles through that portion of the city, formerly known as Birmingham, where the principal iron and glass manufactories of the city are located, and has side tracks running into all of the leading works, which will insure to the road the bulk of their business. An inclined track has also been constructed in Pool No. 1, near the American Iron Works, by which loaded cars are run on barges and taken across the Monongahela River to the manufactories on the North Side, and unloaded into the mills direct. This feature is one of the most promising characteristics of the new road, furnishing, as it does, the means of securing a large business that could not otherwise be reached. The depots of this road are on Carson street, on the South bank of the Monongahela River, at the terminus of the Smithfield Street Suspension Bridge, and are admirably arranged for the purposes of the road. The officers of the company are men of rare comprehensive ability and experience, Mr. W. C. Quincy, the general manager, was for several years connected with the Western Division of the B. & O. R. R., and was one of the most popular and efficient superintendents ever connected with that road. Mr. A. D. Smith, General Passenger and Ticket Agent, was formerly Auditor of the B. & O. R. R. at Columbus, Ohio, which office he filled with credit and consummate ability. The freight department is in charge of Mr. C. A. Chipley, a gentleman eminently qualified for the position, and deservedly popular with the patrons of the road. The principal offices of the company are located at No. 77 Fourth ave., Pittsburgh. Mr. R. W. Jones, Master of Transportation, is a very capable and efficient officer, and was formerly connected with the B. & O. R. R.

MOUNT OLIVER INCLINE-PLANE RAILWAY CO.

Head of 12th St., S. S.

There would appear an evident lack of completeness in this work, devoted to the industries and general activities of the cities of Pittsburgh and Allegheny, should there be an omission to chronicle the enterprise and engineering skill associated with our beautiful Incline-Plane Railroads. Among these we take pleasure in calling attention to the Mount Oliver Incline-Plane Railway Company. Like other enterprises, this was the result of a necessity created by the gradual growth in population of the South Side, and the attractive sites for residences offered in the beautiful section of Mount Oliver. This Company was organized in 1872 under a State charter, with a capital of \$80,000. Having commenced operations at an inauspicious time, when our national financial difficulties were causing great shrinkage in all values, and in the midst of one of the severest panics through which the country has ever passed, the heavy expense and outlay for material, and the proper machinery, cars, buildings, &c., the shrinkage in values so affected this organization that it was obliged to go into liquidation and allow the sale of all stock and appurtenances to be sold at sheriff sale in 1875. Twelve of the original stockholders found it necessary, to protect themselves, to purchase the road, with the hope of saving, in time, the amount they had previously invested. Since that time the Mount Oliver Incline-Plane Railroad Company have placed their line in the most perfect and safe condition for the conveyance of passengers and freight up that lofty and attractive eminence, and is becoming, year after year, more popular with the general public. Since its organization the population of this locality has continued to increase and gives sure promise that, before many years more, Mount Oliver will be one of the most thickly-settled suburban towns in this vicinity, as it certainly is one of the most beautiful and inviting. Taking the car at the foot of Twelfth St., South Side, you are gradually elevated to an eminence which, perhaps, gives the most comprehensive and extended view of the city and surrounding country to be had in this vicinity, the distance between the two stations being about 1600 feet. In fact it secures the most perfect view to be had of the city, and spreads out a landscape view for a distance of 18 miles, making it the most desirable and popular resort for sight-seeing, day or night. A double track is provided, so that while one car is ascending the other is descending, making trips every five minutes, the operating machinery being on the summit of the Mount. While this, as previously remarked, is yearly becoming more and more popular with the citizens of Pittsburgh, it cannot fail to attract the attention of all visitors from a distance, for you cannot really say that you have seen Pittsburgh until you have enjoyed the view presented and become exhilarated by the enchanting scene presented from Mount Oliver. The street cars from the city run within a short distance of the Twelfth-St. station, South Side, and for the small expense of five cents you can enjoy a view which creates a more lasting and beneficial impression than dollars could otherwise convey. Very comfortable and substantial passenger stations have been provided by this Company at either end of the incline, and nothing is lacking which can add to the convenience and attractiveness of this route. Those desiring can be accommodated with refreshments or meals at very small expense, while beautiful gardens, parks and groves offer a delightful retreat. The machinery and appliances of this Company are thoroughly tested and inspected to conserve the convenience and safety of passengers. "What if an accident would happen?" is a common remark. In answer to this we can cheerfully say no accident has ever happened, and, to make assurance doubly sure, double wire cables, each thoroughly tested, are provided, so that there is no possibility of accident or injury. The steel-wire drag cable is used, so that, if, in any possibility, the first cable should at any time give way, it will still be secure. The officers of this Company are all men of the highest standing, well and favorably known in social and business circles. They are as follows: C. J. Schultz, President; Peter Haverman, Joseph Keeling, John Nusser, Ferdinand Bentz, John B. Beach, and Frederick Hampe, Directors. At the head of this incline the visitor will find a comfortable place of resort, the National Beer Garden, John Nusser, proprietor, where meals and all the luxuries of the season can be had at all times.

H. COLEMAN,—Groceries and Provisions, 2836 Carson St.

This enterprising eaterer to the home and table of families in this section of the Smoky City is entitled to worthy mention among the best class of Grocery and Provision houses and the general business interests of this city. Mr. H. Coleman was born in Port Perry, this county, in 1841, and came to this city in 1866, and in 1867, in connection with a brother, commenced business with a small capital. Since then he has taken the business alone, and has managed, by industry and economy, to gradually increase the original investment and stock. He occupies a three-story brick building, which is 20 x 50 feet in size, located at No. 2836 Carson St., South Side, and is patronized by the best class of citizens in that part of the city, as well as a large country trade. His Store will at all times be found fully stocked with the very best class of Family Groceries and Provisions of every description, Flour, Feed, &c., and his prices as low as you can buy articles of same quality in the best houses of the kind in Pittsburgh. Mr. Coleman has not only built up a permanent and growing business, but established a character for fair and square dealing and courteous manners, which has gained the esteem of a wide circle of friends and patrons.

GRAFF, BENNETT & CO.—Clinton Iron & Nail Works, Millvale Iron Works.*Office and Warerooms, 97 Water St.*

Among the most distinguished iron works whose works have assumed such an extent as to exert a powerful, if not vital influence upon the prosperity and development of the city, Messrs. Graff, Bennett & Co. may be said to occupy a leading position. This house was established in 1854 by a copartnership effected between Messrs. John Graff, James I. Bennett, Wm. B. English and E. H. Marshall, under the existing style, no change having occurred from that time except the demise of Mr. English in 1865, whose interest was absorbed by the other members of the firm. Within a year from the time of its formation the company became possessed by purchase of the Clinton Mills, which had been built seven years previously and were owned by Cuddy, Jones & Co., who retired from business. This plant, which was the first property acquired by Graff, Bennett & Co., was, at that time even, regarded as a small one, and in comparison with the extensive works now occupying the same site, must have been almost insignificant. To the work of increasing their business, resources and facilities, however, the firm devoted itself with unusual talent and vigor, enlarging all these annually at a rapid ratio, keeping pace with every improvement suggested by inventive skill or experience. The Clinton Iron and Nail Mills, which still occupy the original site on the south bank of the Monongahela river, opposite the lower part of the city, now cover an area of about eleven acres, having a frontage on the river of 1,500 feet, extending back to the base of the bluff known as Mt. Washington. Within these limits are the rolling mills, nail factories and blast furnaces of the firm, the latter constructed in 1855, being the first ever operated in Allegheny County. Here are employed about 400 men in the various departments in operating the machinery, which is most complete in every respect, consisting in part of 6 trains of rolls, 7 double puddling furnaces, 12 single puddling furnaces, about 50 nail and spike machines, 7 steam engines, with 12 boilers in 3 batteries, aggregating about 400-horse power, and other appliances, the total consumption of coke being 80,000 bushels and of coal 65,000 per month, the furnace having an annual productive capacity of 12,000 tons of iron. In 1863, owing to the rapidly increasing business of the firm, which found its existing facilities too contracted to supply the requisite product, it was considered expedient to purchase an additional plant, and the Millvale Iron Works were at once added to the assets of the concern. These works are situated on the north bank of the Allegheny river, nearly opposite 49th street, and were established originally in 1847 by the Mechanic's Iron Company, now long extinct. When they came into possession of the present owners the plant was a small one, but underwent the same changes, enlargements and improvements that characterized the history of the Clinton Works. The dimensions of the main building of the Millvale Mill are 150x900 feet, besides which there are numerous dependent structures and dwellings for employes (who number from 400 to 600), forming one of the most desirable mill properties in the State. The machinery and appliances in operation at this establishment are of the best construction and most recent design, consisting, with other apparatus, of 10 Danks rotary furnaces, after Danks' patent, but materially improved upon in many respects by the experience and knowledge of the house; 22 hand puddling furnaces, 10 heating furnaces, 1 universal mill with reverse engine, 28-inch plate train, 2 muck trains, 12-inch hoop and guide trains, bar rolls, 46 cylinders, and 4 batteries of powerful boilers. This mill is the only one in the country where the introduction of the Danks furnace has been attended with such success as to make unnecessary the labor of skilled puddlers, the rotary action supplying all the requisite manipulation. The product, of these works is mainly Pipe Iron, Tank Sheet Iron, Bridge Iron, Iron Plate and Merchant Bars, the total capacity of which in manufactured iron is stated at 20,000 tons annually, not including the output of the Clinton Mills or the firm's interest in the Isabella Furnaces, the last named having a productive capacity of 75,000 tons per year. Added to these home interests of this house are others located in the State of Ohio of no inconsiderable capacity and product. At Latonia, in that State, are two blast furnaces, known as the "Graffton Furnaces," owned and operated by this firm in the manufacture of Bessemer Pig Iron, and a Charcoal Furnace in Paulding County, Ohio. The house established in 1860 for the more convenient accommodation to their Southern and South-western trade, a branch house in St. Louis at 622 North Second street, to which point large quantities of their manufactures are shipped for sale. There, also, is kept in stock a complete line of heavy hardware, wagon stock and agricultural implement irons and trimmings. Of the character of the firm or its individual members, little need be said here, that for more than a quarter of a century it has been deeply involved with the most exigent interests of the community is a fact too well known to require comment. Mr. Bennett, the senior partner in age, is a man widely known and respected for his undaunted enterprise and expansive views. As President of the Pittsburgh and Lake Erie Railroad, he has just brought that great project to a successful issue, conferring by the accomplishment of this scheme a benefit upon the industries of Pittsburgh not yet fully realized, a director of the Peoples National Bank, the M. & M. Insurance Co., as well as President of the Ewalt St. Bridge Co., and connected with numerous organizations, Mr. Bennett, since 1845, the period of his settlement in this city, has been prompt to foster every measure that pointed to the conservation of the public welfare, or gave an increased impetus to the general prosperity. The removal of Mr. John Graff to Pittsburgh was co-incidental with that of Mr. Bennett, though the latter was born in Franklin, Crawford Co., Pa., and the former in Westmoreland Co., this State. Mr. Graff is recognized as one of the most active and enterprising business men in our city, and his connection with this house has been highly conducive to its stability and success. The firm duties of Mr. Marshall represent by no means the least important part of the work, and from the skill displayed in the operative practical management of the Clinton Mills, he takes a high rank in the trade as an accomplished iron man and metallurgist. With a trade that extends over the extreme limits of civilization upon this continent, and that involves millions annually, the house of Graff, Bennett & Co., as one of the institutions indissolubly connected with every interest that aids or retards the progress of Pittsburgh, is justly entitled to the place it has attained and the consideration with which it is universally regarded.

SECOND NATIONAL BANK OF PITTSBURGH,*Corner Liberty & Ninth Sts.*

Among the banking associations of this city a few of course take positions in importance, wealth and business capacity in advance of the remaining large majority in numbers, and as one of these few, the Second National is one of the most important. The inception of this bank was under the name of "The Iron City Trust Company," which was organized in July 1859, and did business under that title until February 1864, when its managers complied with the National Bank Act, and its name was changed to the present style with a capital of \$300,000. Upon the last named event the late Judge G. E. Warner, who was president of the old organization was chosen president. He was succeeded in 1871 by George S. Head, Esq., who still fills this important position and is a member of the board of directors, composed of the additional following gentlemen:—Wm. Cooper, G. N. Hoffstot, Geo. E. Neiman, John Hays, John Heath, Franklin Osburn, Geo. H. Dauler and Wm. I. Berger, with Geo. H. Willock, Esq., filling the position of cashier. Under this management the bank has pursued a course of pronounced thrift, as evidenced by its having paid up to April 30, 1879, as dividends since its existence as a National Bank, the sum of \$330,000 and holding a present surplus of \$75,000 in addition. The building occupied by this bank is of its own ownership, and was erected in 1876-'77 at an outlay (including lot) to the institution of \$100,000. This building is one of the finest and most costly in the city, and was designed by one of the ablest architects in the State—Edward M. Butz, Esq., of Allegheny city, who is known and acknowledged to be at the head of his profession; it is of three stories, and basement built of iron, beautifully trimmed and ornamented, the room occupied for banking purposes being 40 feet square with 20 feet ceiling, which has lately been tastefully frescoed and decorated. The cashier's assistants are composed of the following list:—T. W. Welsh, Jr., teller; Samuel Lewis, general bookkeeper; James McElroy, individual bookkeeper; Samuel McClurkin, Jr., discount and collection clerk, and H. Sproul, messenger. The Eastern and Foreign exchanges are made through the Central National Bank and National Park Bank of New York and the Union National Bank of Philadelphia, while the Second National Bank of Baltimore and the Fourth National of Cincinnati are the principal correspondences for their respective districts. The business of this bank is catalogued as among the heaviest of its cotemporaries in loans, discounts and exchanges, and carries a line of deposits generally aggregating the sum of \$425,000, a circumstance showing in the most expressive language the degree of confidence in the ability of its management.

JOHNSON, EAGYE & EARL,—*Wholesale Grocers, 120 2d & 149 1st Avs.*

One of the largest and most thoroughly reliable wholesale Grocery Houses of Pittsburgh, is that now conducted by Messrs. Johnson, Eagye & Earl, who occupy the spacious and commodious warehouse at No. 120 Second avenue, extending through to First avenue, No. 149. The house was originally founded in 1844 by Mr. John Irvine and Mr. Mahlon Martin, under the firm name and style of Irvine & Martin. Two years later Mr. Irvine disposed of his interest in the business to Mr. Wm. H. Smith, and the style became Martin & Smith. In the following year, 1847, Mr. Wm. M. Sinclair purchased the interest of Mr. Martin, and the business was conducted until 1855 under the firm name of Smith & Sinclair. During that year Mr. Sinclair retired and a new firm was organized by Mr. W. H. Smith, W. W. Mair and Joseph R. Hunter, doing business as Smith, Mair & Hunter. In 1857 Mr. Mair retired, the remaining partners continuing the business as Wm. H. Smith & Co., until 1866, when Mr. Hunter retired and Mr. Sullivan Johnson and Joseph T. Colvin were admitted as partners and the firm name became Smith, Johnson & Colvin. In 1869 Mr. Smith retired from the firm, which then became Johnson & Colvin and subsequently Johnson, Colvin & Co. This firm was succeeded by the present one of Johnson, Eagye & Earl in 1876. It will be seen from the above sketch that this is one of the oldest wholesale grocery houses in the city, having under the various styles mentioned been continuously engaged in business for the past thirty-five years, and during all that period recognized as one of the leading houses in the trade. The capital at present invested in the business is \$90,000, and their stock, which is always full and complete in all departments, ranges in value from \$40,000 to \$65,000. The trade of the house extends throughout Pennsylvania, Ohio, Maryland and West Virginia, and amounts to between \$500,000 and \$600,000 per annum. Twelve clerks and assistants are regularly employed and their business is steadily increasing from year to year. While they transact a general grocery business, dealing in every description of staple goods pertaining to that line, the leading specialty of the house is tobacco, of which they now carry a very large stock. Mr. Sullivan Johnson, the senior member of the firm, was born in Somerset, Somerset county, Pa., in 1831, and was for fourteen years engaged in active business at Adison, Somerset county, as a member of the firm of Ross & Johnson. He came to Pittsburgh in 1866 and has since been prominently identified with the wholesale grocery trade here. Mr. Geo. W. Eagye is a native of Washington county, Pa., and was born in 1843. He was for several years engaged in mercantile pursuits at Upper Middletown, Pa., and has been a resident of Pittsburgh since 1867. Mr. Edwin F. Earl was born in Somerset county, Pa., in 1842. For nineteen years he was in business at Jener Cross Roads, Pa., eight years of which time he was a member of the firm of Kierman & Earl. He has resided in Pittsburgh since 1876. The members of this enterprising house are all active, energetic business men and worthy representatives of the important commercial interests of Pittsburgh.

ANCHOR SAVINGS BANK,—*134 Fifth Av.*

Reliable institutions for savings in a great manufacturing city like Pittsburgh are acknowledged necessities, and the amount of funds annually placed on deposit by the working classes alone would appear almost incredible were the exact figures attainable. The Anchor Savings Bank is one of the most thoroughly reliable and responsible financial institutions of Pittsburgh, and as such enjoys the confidence of all classes of citizens from the "horny-handed sons of toil" to the capitalists, manufacturers and merchants, who transact business over its counters. The Anchor Bank was founded in April, 1873, as an individual banking house, and became a chartered institution in July 1877 with a capital of \$100,000. It transacts a general banking business, receiving deposits, making collections, discounting paper and making loans on reliable security. The amount of deposits at present exceed \$60,000 and the latest reports show the affairs of the bank to be in a most prosperous condition. The board of directors is composed of well known and reliable citizens of high standing in the community under whose able and judicious managements the interests of all are carefully looked after. Major A. M. Brown is president of the bank, Mr. Robert J. Stoney cashier, and Mr. W. H. Watt teller.

H. ANSHUTZ & CO.—*Lafayette Stove Works, 214 Liberty St.*

In making an examination of the industries of Pittsburgh with reference to its resources in the casting and founding of iron, there are several establishments engaged in this branch of manufactures that deserve special mention in this work. Of these the firm of H. Anshutz & Co., is by no means the least important, either in the character of its productions or the extent with which its operations are conducted. The Lafayette Stove Works were established in 1844 by S. Showers & Anshutz, who commenced business with but a very small capital, gradually increasing the same year after year by industry and a policy of uniform and spotless integrity. In 1854 Mr. Showers retired from the concern, leaving Mr. H. Anshutz sole proprietor until 1863, when he admitted John H. & C. W. Anshutz, his two sons, and the firm became H. Anshutz & Sons, continuing so until 1872, when upon the death of John H. the firm remained composed of H. & C. W. Anshutz under the title of H. Anshutz & Son, and became widely known under the style, a title which was not changed until January 1, 1879, when by the admission of W. T. Bradberry the firm became H. Anshutz & Co., as at present. The foundry is located on River avenue, Allegheny city, and is an extensive structure 150x233 feet in dimensions. Here are manufactured cooking and heating stoves, portable ranges, grate fronts, fenders, registers, furnaces, &c., besides other castings to order. Fifty moulders and other skilled artisans are employed at these works, requiring a disbursement monthly of about \$2,000. All the machinery and appliances requisite for securing the best results are here found in the greatest perfection; one steam engine and boiler 20-horse power are in use and no apparatus is wanting that invention can suggest or capital supply to meet every modern demand. In addition to this establishment the firm possesses two capacious ware rooms, one on Ohio street, Allegheny, No 196, 30x82 feet, stocked throughout with goods of the finest quality, and another, the principal one and wholesale house, at No. 214 Liberty street, Pittsburgh, 18x135 feet, also replete with a valuable and ample stock, which at both stores is estimated as being worth not less than from \$15,000 to \$20,000, the patterns, &c., at the factory exceeding a value of over \$10,000, while the annual business averages between \$60,000 and \$75,000. This trade is by no means confined to these cities or even to their immediate environs, but reaches through Ohio, West Virginia, Indiana, Iowa and many other Western States; goods having been exported to Cuba and other foreign markets. Since its establishment many important improvements have been made by this house in cooking stoves, grates and ranges, so great indeed are the advantages possessed by some of the makes peculiar to the firm that the demand is rapidly increasing, especially for the Tremont, Glendale and Monitor ranges and stoves of which they cast no less than fifty different patterns. Mr. W. C. Anshutz is a native of Louisville, Ky., from which place he was removed to Pittsburgh at an early age. He is well known in business circles and occupies a directorship in the German National Bank of Allegheny and the Tentonia Insurance Co. of the same place, and is connected with other institutions of a public character. Mr. Bradberry is also well identified with the industries of this community and is a native of Allegheny city. Henry Anshutz, Esq., the senior partner and founder of the firm, was born in Alsace, a province of France at that time, in 1812. At the age of twenty years he decided to emigrate to this country and arrived in Pittsburgh in 1832, and after laboring for twelve years originated his present enterprise with a total capital of \$200. More than a third of a century has elapsed since that time and the house of which he is now the head, has acquired an active capital of from \$60,000 to \$75,000, which is supplemented by ample private resources—a director in the Pittsburgh Gas Co. and connected with other influential enterprises and corporations. Mr. Harry Anshutz represents in himself the best class of self-made men, who without ostentation, but endowed with singular courage, resolution and integrity have risen from the ranks to positions of private honor and public trust. In every way the firm of which this is but a brief account, is worthy of the success it has attained, and the esteem in which it is held by the entire community.

WM. VELTE & CO.—*Machinists and Engine Builders, Penn Av. and 32d St.*

The establishment of Wm. Velte & Co., the subjects of the present sketch, was founded in 1876, at No. 1023 Penn Avenue, by this firm. They soon entered upon a successful career, and found themselves pressed with a rapidly growing business, which necessitated in 1879 removal to their present very convenient and finely located situation, where they have a very fine shop, 25x100 feet in dimensions, supplied with every needed tool and appliance, driven by a fine engine, affording them abundant and convenient facilities for the successful manufacture of everything in their line. They are employed largely in building Stationary and Hoisting Engines, Portable Engines for sinking wells, and for agricultural or other purposes, turning out very superior and excellent work of this character, also do all kinds of machinists' work in their line. They employ from 12 to 20 skilled and experienced machinists, who are directly under the careful supervision of Mr. Velte himself. Mr. Wm. Velte is a native of Pittsburgh, learned the trade of machinist early in life and has followed that vocation continuously ever since. He held the position of master mechanic of the extensive machine shops of the Atlas Works, for seven years, thus acquiring a very extensive and valuable experience and a thorough knowledge of all branches of the business. Mr. V. is an accomplished and ingenious machinist and enterprising and reliable business man, and a popular and courteous gentleman.

J. WEAVER & CO.—*Advertising Agents, 116 Smithfield St.*

Advertising agencies, when properly conducted, have not only become necessary to the publishers of country newspapers, but a great convenience to city advertisers desirous of placing before the public in an advantageous and conspicuous manner the inducements which they offer in their line of business. The agency of J. Weaver & Co., at No. 116 Smithfield street, is the only thoroughly reliable newspaper advertising agency in the city, and as such is entitled to the favorable notice and consideration of manufacturers and merchants desirous of reaching the attention of rural readers. Mr. Weaver established his agency here in 1870 with only twenty-eight newspapers upon his list. He has now regular contracts with over fifteen hundred and represents every reliable paper on the continent. He also is prepared to furnish estimates and insert advertisements in foreign journals, magazines and periodicals. His facilities are not surpassed by those of any similar establishment in the United States and his relations with publishers and advertisers have always been of the most amicable and satisfactory character. His business, which extends all over the United States, amounts to more than \$50,000 per annum. Mr. Weaver is a native of Washington county, this State, a graduate of the famous Washington and Jefferson college, and a gentleman of culture, ability and fine business qualifications. Commencing with moderate means and upon a comparatively small scale, he has established a business of which he may well feel proud and which entitles him to favorable notice in a work of this description.

GEO. S. HAINES.—*Manufr. of Trunks, Valises & Satchels, 144 & 146 Wood St.*

Mr. Geo. S. Haines has been engaged in the manufacture of Trunks, Valises, Traveling Bags, Satchels and Tourists Equipments, as well as the varied outfits of commercial travelers, for the past six years. Realizing the fact that the traveling public should have a reliable article, Mr. Haines has made it a special study to make a perfect and durable trunk, which is known the world over as the "Haines trunk." It is decidedly the best trunk we have ever seen. Mr. Haines has lately increased his manufacturing facilities, and his factories are now located at numbers 6, 8, 10, 12 & 14 Diamond street, 29 and 30 Union street and 22, 24, 26, 28, 30 and 32 Decatur street, city. His salesrooms are at 144 and 146 Wood street, corner Virgin Way. They are large and commodious, and are well filled with the trunks for which Mr. Haines is so popular. A specialty to which we would direct our readers, is the line of Agent's Sample Cases or Trunks for carrying glassware, groceries, tobaccos, boots and shoes, Hats, Hardware, Books, Toys, etc. In fact they are the very thing an agent requires to display his samples to the best advantage, and carry them in safety. The repairing department is also complete in every respect. Any dealings our readers may have with Mr. Geo. S. Haines, 144 and 146 Wood street, will be eminently satisfactory.

ALBERT H. WILSON.—*Druggist, Junction of Penn & Frankstown Avs.*

Among the prominent business houses of the East End, this work will record none more worthy of consideration than that of the very handsome and conveniently located drug store of Mr. Albert H. Wilson, situated at the junction of Penn and Frankstown avenues. Mr. Wilson first opened his business here in 1876. His room is well stocked with pure drugs and medicines, all popular and desirable patent medicines, perfumeries and toilet articles, notions, &c. He gives special attention to the compounding of physician's prescriptions and can be depended on for the purest medicines and perfect accuracy. Mr. Wilson is a native of Lawrence county, in this State, came to this city in 1874. After giving several years study and application to the drug business and to the compounding of medicines, he established his present business, where he has met with a liberal patronage.

KNOX, MORRIS & CO.—*Coal, Slack and Coke, foot of Western Av., Allegheny.*

That which lies at the root and is the basis of the immense manufacturing industries of the Smoky City and her environs is the accessibility of immense coal fields. If, then, so great importance attaches to results, equal significance may properly be given in a comprehensive work of this character to the great coal interests of the two cities. That which promises to become one of the leading firms in the Coal trade is the firm of Knox, Morris & Co., who commenced operations only this year, and will handle about 1,500,000 bushels before the expiration of the year. The main office and yards are located at the foot of Western Alley, besides which they have another office and yards at the foot of Locust St., Allegheny, giving employment at the two places to about 30 men. In connection with the Western Av. yards they have one of the largest elevators for the purposes of handling and shipping Coal, and are already doing a business that will compare favorably with that of any other dealers in this city. This firm consists of J. P. Knox, R. H. Knox and James H. Morris, under the firm name of Knox, Morris & Co., wholesale and retail dealers in Coal, Nut Coal, Slack and Coke. Orders by mail will receive their prompt attention. The energy and ability of the firm entitle it to the most favorable public consideration.



PITTSBURGH LOCOMOTIVE AND CAR WORKS.

Manufacturers of Locomotives, Engines and Boilers.

The Pittsburgh Locomotive and Car Works is a joint stock company, organized in 1865, and chartered by the State of Pennsylvania. It is the oldest establishment of the kind in the two cities and one of the most extensive in the United States. The works are located in the Sixth Ward, Allegheny, and cover an area of about eight acres, the buildings alone occupying more than one-half of that space. They are constructed in the most thorough and substantial manner, supplied with machinery of the finest and most approved styles required in the various departments, necessary in the construction of a locomotive entire and complete. For the past twelve years the works have been in almost continuous operation and the business has been steadily increasing, necessitating the enlargement and improvement of buildings and machinery from year to year. The present buildings are admirably arranged and consist of spacious machine shops, engine houses, smith shops, paint shops, carpenter shop and pattern manufactory, iron foundry, flask shop, cupola house, brass foundry and finishing rooms, boiler manufactory, pattern storerooms and numerous other smaller buildings devoted to the production of the various articles required. The grounds have a frontage on Beaver avenue extending back some thousand feet to the banks of the Ohio river. Switches of the Cleveland and Pittsburgh Railroad Company, with tracks running into the enclosure, connect these works by rail with the various railroads centering in Pittsburgh, greatly facilitating the receipt of supplies and the shipments of finished work to all parts of the Union. The manufacture of Locomotives for broad and narrow-gauge service, oil engines and portable and stationary boilers, has thus far occupied the attention of this company, not having yet engaged in the manufacture of cars. They pay especial attention to Patent Slide-valve Engines, and Superior Plange Iron Boilers, and all their work is fitted to gauge and templates and made thoroughly interchangeable in all its parts. From 400 to 600 skilled workmen are constantly employed, the capacity of the works being one hundred locomotives, two hundred and fifty stationary engines, and seventy-five boilers per annum. During the past two years they have turned out an immense amount of pumping and oil machinery for the oil regions. Six large steam engines, aggregating more than 400-horse power, are required in the various departments of these works, and four large steam hammers of immense power may be especially mentioned as remarkable for size and capacity. All of the machinery, however, is of the most perfect description and approved designs. The officers of the Company are—Mr. D. A. Stewart, President; Mr. Reuben Miller, Vice President; Mr. Nelson Miller, Secretary and Treasurer, and Mr. D. A. Wightman, Superintendent of the Works. These gentlemen are thoroughly qualified for the important positions which they have so satisfactorily filled, and to them is due great credit for the success of the corporation and the high reputation which the products of the company have acquired throughout the length and breadth of the United States.

ST. CLAIR HOTEL,—C. P. Bailey, Prop., Cor. Penn Av. & Sixth St.

Established forty years ago, this celebrated hotel has always maintained a favorite position in the esteem of the traveling public. Four years since the present incumbent succeeded to the management of the concern, Joseph N. Anderson, the owner of the property, being his predecessor. No hotel in the city is more admirably situated to suit the requirements of the commercial traveler, occupying the corner of Penn avenue and Sixth street, the two greatest arteries of transit between Pittsburgh and Allegheny City and outlet to the eastern part of the city as well as the South side from the Point bridge, no site could be better adapted as a center for reaching in all directions. This fact is not overlooked by the public who patronize this hotel in no stinted manner. Every modern convenience and appliance is brought into requisition to make the house equal in every respect to more pretentious establishments. The furnishing is in keeping with neatness and comfort, the dining room affording ample accommodations for 200 people at one time, while the parlors, reception rooms, offices, billiard room and all the appointments are such as to conduce to the ease and comfort of every boarder. The hotel has a capacity for 250 guests, requiring the attendance of 60 servants and employes in various departments. Mr. C. P. Bailey is a native of this state, and as a host is deservedly popular. He occupies the position of School Director in his district and is highly esteemed for the very able manner in which he conducts his business. Mr. W. H. Filler, a favorite with traveling men, has charge of the office. The regular terms are \$2.50 per day, and as a commodious and well-regulated hotel, it is cordially commended.

THOS. McCOY,—Oysters, Fish & Game, 46 and 47 Diamond Market.

Mr. Thos. McCoy, the pioneer in this business, is deserving of more than passing notice in this work for the extent and activity of his business, as it is one that reaches very large proportions than is generally supposed. The trade of this house alone reaching very large figures annually, and extends to all portions of Western Pennsylvania, Eastern Ohio and adjacent districts. Mr. McCoy founded his present business thirty years ago, and has during all that period continuously devoted his close personal attention to the business that has grown under his enterprising management into such large proportions. He has during that long time acquired an experience and knowledge of the business, and formed an acquaintance that gives him the largest advantages over younger and less noted firms—every convenience and appliance necessary or useful in preserving in fresh condition the fish, etc., in which he deals, is had, and the most complete and extensive stock of goods in his line of the best quality is always to be had of this house in proper season. In connection with another firm in the same line, a large and perfect refrigerator was erected in which large quantities of their goods are kept in perfect order, the temperature being kept at 28 degrees during the hottest weather. Fish is received by them by the car load by fast freight lines and they are enabled to keep them in their refrigerator in perfect condition, which gives them a great advantage in saving the enormous charges made by the express companies, to those less favored in their line. Mr. Thos. McCoy was born in this county in 1831, and has continuously resided here, and since his maturity has been engaged in his present business. He is a well known, highly respected and popular gentleman and an enterprising, reliable business man; he is a director of the Diamond National Bank. Mr. J. S. Brazier, who is identified with this house and is well known and highly esteemed by the patrons of the establishment as well as the community generally, was born in Washington county in 1833; he now resides in Baden, Beaver county, and is one of the leading citizens of that town. He is a member of the town council and of the school board, and is also a justice of the peace. He is highly esteemed by all who know him. Prompt, energetic and reliable, the house of Thos. McCoy is every way worthy of the most liberal public patronage.

D. W. GARRETT,—Dealer in Oysters, Fish and Game, 44 Diamond Market.

Mr. D. W. Garrett and the business in which he is engaged is worthy of mention in this work. Mr. Garrett is located in the Diamond Market, the leading market house in the city, where he handles an immense quantity of Fish, Oysters and Game, both by wholesale and retail. He began business at his present place in 1866. Five years later Mr. W. C. Sykes associated with him in the business, who remained with him until 1877, at which time he retired, and the business has since been conducted by Mr. Garrett himself, who, in connection with another firm in the same line, have erected a splendid refrigerator, which is perfect in its way, and is kept at the low temperature of 28 degrees during the hottest weather. Their fish are brought from the lakes and other points, by the carload, in refrigerating cars, by fast freight. They are thus enabled to sell to the trade at prices to compete with the lake and eastern fisheries, especially to those lying nearer to this city than points named. Mr. Garrett has a very large and growing wholesale trade throughout the entire county, contributing to this city. He was born in Union Co., this State, in 1842, came to this city in 1866, and embarked in his present business, prior to which time he had been engaged in farming and general business pursuits.

JUNIATA BOLT WORKS & VALLEY FORGE, —Gillespie Bros. & Co.

Twenty-first and Railroad Streets and Allegheny River.

The "Juniata Bolt Works & Valley Forge" was established in 1875 by Biggerstaff & Co., Mr. T. A. Gillespie, one of the present proprietors being a member of the firm. The business was at first confined exclusively to the manufacture of Oil Well Supplies. Mr. Biggerstaff & Co. were succeeded in 1877 by the present firm consisting of Mr. T. A. Gillespie, Mr. E. G. Gillespie and T. J. Bray, the latter retiring after a time, the business was continued by the Messrs. Gillespie, under the firm name and style of Gillespie Bros. & Co. Their extensive works are located at the corner of Twenty-first and Railroad Streets, on the banks of the Allegheny River, and cover an area of 48x200 feet. The Forge and Finishing departments are each under the immediate supervision of skilled and experienced mechanics and are supplied with the most perfect and complete machinery. One fifty-horse power engine furnishes the motive power for the establishment and sixty skilled hands are regularly employed at an average monthly expense of \$1,500. Messrs. Gillespie Bros. & Co. are sole manufacturers of the celebrated Juniata Plow Bolts, which are made from the very best quality of refined charcoal iron and are acknowledged to be equal to any plow bolts in use. They also manufacture a superior style of Solid Box Vises, making a specialty of this particular branch of their business. They also manufacture every description of iron and steel forgings for agricultural implements, and for plumbers, machinist and agricultural purposes. Oil well supplies in great variety, including single and double-swivel snatch blocks, iron and steel sucker rods, joints, hooks and swivels, bull-rope couplings, sledges, chisels, wedges, etc., and are sole proprietors of a number of valuable patents and improvements in oil-well supplies, which meet with a ready sale and are highly commended by practical men. An improved wrought-iron water tuyere is among the products of this establishment. It is pronounced the cheapest and best ever offered to the trade and possesses many advantages over any other tuyere now in use. The Adams Patent Self-loading Truck is another specialty of the "Valley Forge" and is highly commended and endorsed by many of the leading houses, railroad companies and manufacturers of the United States. In fact, it would be impossible in the limits of an article of this description to enumerate all the varieties of iron and steel work produced at this establishment. An Illustrated Catalogue and Price List will be furnished by the firm upon application, and all correspondence will be promptly and carefully attended to. The trade of this house extends over every portion of the United States, and many of their products find a ready sale in foreign markets. Both members of the firm are "natives here and to the manor born," and although yet young men have for years been identified with the industrial interests of their native city and occupy a prominent position among the representative businessmen and manufacturers of the Iron City. They are public-spirited, enterprising and energetic gentlemen, who by industry, application to business, unswerving integrity and probity have attained their present enviable reputation and built up a business that will compare favorably with that of any similar establishment in the United States.

A. A. ANDERSON & SON, —Book & Job Printers, 99 Fifth Av.

Among the Book and Job Printers of the city the firm of A. A. Anderson & Son is not less widely or favorably known than any house in Pittsburgh engaged in the same industry. The business was founded in 1826 by John B. Butler, who came from Ravenna, Ohio and with whom the senior, Mr. Anderson, was then an apprentice. After the expiration of his apprenticeship he bought out Mr. Butler and carried on the business until 1836, when he formed a partnership with Luke Loomis, under the firm name of Anderson & Loomis; continuing for two years, when Mr. Loomis retired. Mr. A. continued until the year 1863, when the present firm of A. A. Anderson & Son was formed. The facilities enjoyed by this concern for the prompt and elegant execution of all contracts either in the way of elaborate book publications and job work of all descriptions or the finest grades of legal, commercial and railroad printing are not excelled by any firm in the city, nor is the character of the work turned out surpassed by any similar establishment. The premises occupied by A. A. Anderson & Son are located at No. 99 Fifth avenue, immediately in the rear of the Dispatch building, and consist of a spacious building, three floors of which are used by the firm. The machinery is of the best and finest makes, consisting in part of Cottrell & Babcock, Potter and Gordon presses; 15 to 20 hands being employed in the various departments of the work. Mr. A. A. Anderson is a native of Ohio, having been born in Portage county in 1811, settling in this city as a youth of sixteen, from which period his identification with the industries of Pittsburgh date. A self-made man of the truest type, earnest, unassuming and honorable, Mr. Anderson has achieved a high position in the respect of the community with whose interests he has been so long concerned. As a reliable firm in every respect, the house of A. A. Anderson & Son can be safely commended as a desirable one with which to do business, and form permanent, profitable and pleasant relations.

W. B. LUPTON & CO. —Slate Roofers, No. 354 Penn Av.

This business was established in 1862 by Mr. W. B. Lupton. In 1868 Mr. P. Le Goullon became associated with Mr. Lupton, and since that time the business has largely increased, and the firm has transacted a business of not less than \$75,000 per annum. But, owing to the general depression in business of all kinds, especially that of building, it will not amount to that at the present time. They occupy the premises No. 354 Penn ave., 20x110 feet in size, as office and wareroom, with an additional warehouse, 25x80 ft. They have also extensive works in Harrisburg, Pa., for the manufacture of pitch and saturated tar paper, and a similar establishment in the 35th ward in this city. Their facilities are complete in every particular for all descriptions of Roofing, and are extensive manufacturers of all kinds of roofing material, such as Gravel, Cement and Felt and Paving Pitch, Roofing Lining and Carpet Felt, Black Varnish, Pine and Coal Tar, etc. They are also dealers in Slate of superior quality and various colors. This firm is prepared at all times to make contracts for every description of work pertaining to their line, however extensive and in any section of the country. Mr. Lupton was born in Baltimore in 1833, but has for many years resided in Pittsburgh. He is an active, energetic business man, and has been closely identified with many of the most prominent public enterprises of Pittsburgh. Mr. P. Le Goullon is a native of Pennsylvania, and was born in 1837.

H. S. GARROW, —Florist, S. W. Cor. Diamond Market.

Among the establishments in the Smoky City engaged in Floral and Plant business, the establishment of the very popular and enterprising young gentlemen H. S. Garrow, S. W. C. Diamond Market, is deserving of mention. Mr. Garrow is now proprietor of the floral business of the famous Knox Fruit Farm, his extensive greenhouse being located on that farm, and in which annually millions of the most choice and popular bedding and ornamental plants are grown, and are shipped by mail and express to every portion of the United States and British Dominions. Mr. Garrow produces a large quantity of choice cut flowers, also, in his greenhouses, and does a large cut flower business, bouquets, baskets, funeral designs and rare and beautiful designs. As a floral artist, and for skill and taste in the arrangement of all kinds of flowers, Mr. Garrow is not excelled by any artist in this city, and he has a large and growing trade in this branch of his business. Mr. Garrow is a native of Pittsburgh, born in 1835, and since his boyhood has been connected with the floral business, having worked in the establishment of Rev. J. Knox many years, and has remained with that institution until now being proprietor of the business. He is a popular young gentleman of character, and possessed of energy and ability.

KEYSTONE BRIDGE COMPANY,—51st & 52nd Sts.

Prominently associated and identified with the iron and steel manufacturing interests of Pittsburgh, the Keystone Bridge Works deserve most creditable mention as a type of the ingenuity, skill and enterprise of the Iron city. The original works of this Company were established in 1863, under the firm name of Piper & Schaffer, with the object of constructing iron bridges; two years later the Keystone Bridge Company was organized with a capital of \$300,000, absorbing the former firm and works. The business and facilities were at once largely augmented and increased. In 1872 the Company became incorporated under the laws of Pennsylvania by special act, the charter authorizing an increase in the capital stock to the amount of \$1,500,000, and conferring privileges for building, etc. This establishment covers an area of over six acres and is divided into the following departments:—machine shops 80x300 feet; smith and bolt shops 80x300 feet, erecting shops 70x400 feet, foundry 60x120 feet, besides other shops. The shop plant embraces machinery of the latest approved kind for the most superior and accurate work, driven by an engine of aggregate 400-horse power and employing from 300 to 500 most skilled artisans, and we believe it no more than just to assert that no establishment of like character in the United States is better equipped with tools and appliances for the construction of light or heavy iron or steel bridges. Special attention is paid by the Keystone Bridge Company through its management to the quality of iron and steel used in bridge work, both at the rolling mills and at the bridge shops, and tests are extensively made, to insure the perfect adaptability of the material to the use for which it is intended. This Company erected the double road iron bridge 348 feet span over the Schuylkill river at Fairmount, Philadelphia, which in all respects warrants the success of the tests applied. We might also mention among the notable bridges of their construction the wrought iron railroad bridges crossing the Connecticut river, at Middletown, Conn., 1232 feet in length, two spans 54 feet, four spans of 206 feet and one pivot or draw span of 300 feet; also the wrought iron double track railroad bridge over the Mississippi river at Keokuk, Iowa, with a total length of 2012 feet, the draw span having a length of 376 feet. To the construction of wrought iron turn-tables this company has given considerable attention, and has brought the appliances to the highest degree of perfection. These turn-tables are superior to those made of cast iron, and have given entire satisfaction wherever used. Of the many bridges of their construction, perhaps the master-piece of bridge engineering is manifest in the great steel bridge over the Mississippi at St. Louis, constructed by this Company on plans of Capt. J. B. Eads. The tubular system was met and its difficulties overcome in the most accomplished manner. It may be here stated that the aggregate length of railroad bridges and viaducts constructed by this Company during the past two years and those now in hand is fifty-four thousand feet, located in various portions of the United States, from Main to Texas, and in the West Indies and South America. The officers of the Keystone Bridge Company at present are A. Gottlieb, President; T. M. Carnegie, Treasurer; A. D. Cherry, Secretary; and J. H. Linville, Consulting Engineer. The President, as Chief Engineer, is ably supported by a number of assistants, among those prominently known are Messrs. C. L. Strobel, C. E., assistant of the president; J. W. Walker, C. E.; S. B. Opedyke, C. E.; W. Benner, M. E., in charge of drafting department; C. H. Springer, in charge of shops; and a large number of draftsmen and assistant engineers. To the energy and enterprise of the men who have managed the affairs of the Company, Pittsburgh is indebted for a considerable share of her prosperity, and through them she has reared lasting monuments of her industries throughout this country and foreign lands.

ANDERSON & CO.—Pittsburgh Steel Works; Rose, Second & Try Sts.

The annually increasing importance of the steel business of Pittsburgh and the marvelous advances that have been made during the past quarter of a century in perfecting this essential product, leads to a more than ordinary interest in all those enterprises which are identified with this branch of our manufacturing industries and resources. Especially is attention directed to those firms which are the acknowledged pioneers in the production of steel, and to whom may be directly ascribed the extraordinary vitality that has characterized the business during the last decade. It is but fitting to say that among such, the house of Anderson & Co. may properly be assigned a first place, not only from the fact of its being the prime mover in the inauguration of the steel manufacture, but also on account of its extensive operations and the undeniable excellence of its productions. The plant was originated in 1845 by Isaac Jones, who confined his efforts to the construction of one furnace upon the old fashioned English plan and employed a very limited force of workmen. Within a short period however, others became interested in the enterprise with him, and under the style of Jones, Boyd & Co., the plant was enlarged, the quality of the steel greatly improved, and no considerable success attended the operations of the concern. In 1865 Robert J. Anderson, Wm. Wood and J. W. Cook bought out J. B. & Co., and obtained an interest in the house which they finally monopolized, changing the title to Anderson & Wood, which still remained the same after the withdrawal of Mr. Wood in 1871; the senior partner becoming sole proprietor, and so continuing from that time, except during a brief period, when he associated with himself Mr. Passirant, under the style of Anderson & Passirant, which upon the retirement of the latter it became Anderson & Co., as at present. The whole history of the enterprise is marked by constant and obvious improvements and enlargements; resolution, ability and experience seem to have guided its operations and conducted it through a series of signal successes. As an illustration of the magnitude assumed by the Pittsburgh Steel Works, it may be stated that the plant now covers an area of about four acres, and is supplied with an equipment as perfect as the ingenuity of man can suggest or capital supply. The first concern in the United States to adopt and apply the Siemens' furnace, not less than six of these invaluable adjuncts to the manufacture of steel are now kept in constant use, besides three sets of coke hole furnaces, six converting furnaces, three puddling furnaces, twenty-five heating furnaces, sixteen steam hammers, plate, bar, universal, sheet and guide mills of great size and capacity; rolls for homogeneous steel plates, for boilers, plow plates, circular saws, locomotive fire boxes, &c., with other appliances and machinery of great efficiency, rapid and labor saving to the highest degree. In addition to all these advantages the firm constructed within a limited period works for the manufacture of steel rods for wire, and were awarded the contract for supplying the new Brooklyn suspension bridge with this material. From a total annual capacity at the beginning of but a few hundred tons, the product now reaches between six and eight thousand, and this year just closed 8,600 tons. From 300 to 400 workmen are employed in the various departments of the work, resulting in a business that exceeds \$1,000,000 per annum, and necessitating a disbursement for labor alone of over \$300,000 yearly. Over the whole of this establishment, directing, instructing and managing, from the smallest detail to largest and most critical operations the influence of Mr. Anderson is ever active, and from this personal and incessant supervision arises the superior uniform quality of the products and their high appreciation in every American market. Such being a brief outline of the history of this celebrated house, it is hardly necessary to add that its influence upon the industrial thrift of the community has been, and is, promotive of the general well being to no small degree, and it is not going too far to assert that the firm of Anderson & Co. in achieving material prosperity, has also established a high standard of commercial honor, in the adherence to which it has secured the respect and esteem of this community and those with whom it has effected relations.

JOSEPH MILHOLLAND,—Groceries and Produce, St. Clair St., 32d Ward.

This stand was originally started by Mr. Fred. Kauff many years ago, and after many changes Mr. Milholland started in 1878 with a moderate capital. With a good stock of goods, he has succeeded in working up a liberal trade, and now receives the patronage of the best class of citizens in that part of the city. He occupies a two-story building, 25x50 feet in size, divided into two departments, which he keeps stocked with everything in the line adapted to house and home use. The choicest Teas, Coffees, Sugars, Molasses, Syrups, Canned Goods, Fruits, Vegetables, etc. Mr. Milholland, with his assistants in his store, will always show every attention to his patrons and give closest prices. He was born in Dauphin County, this State, in 1818, and came to this city in 1823, where he has resided ever since.

KREPS & BOWERS,—*Hardware, Cutlery, etc., 224 Beaver Av., Allegheny.*

In a comprehensive review of the manufacturing and mechanical interests and industries of these two important cities, the establishment of Messrs. Krebs & Bowers is entitled to creditable mention. This business house was originally started by Mr. Calhoun a number of years ago, and came into the hands of the present proprietors in 1878. The enterprise and excellent business capacity of this firm has already had a marked effect upon the trade, which is greatly improved. They are also lock and tool smiths, and embrace, in connection with their general hardware trade, a mechanical department, with the most complete appliances for conducting this branch, and also for building iron fences, Railings, Grates, Wire Work, etc. Contracts are taken to supply anything in this line upon the most favorable terms, and work guaranteed first-class. The hardware department embraces Farmer's and Mechanic's Tools, Table and Pocket Cutlery, House-keeper's Goods, etc. They occupy a two-story brick building, 20x45 feet in size, for the general store, with the mechanical department, 16x30 feet in size. They also conduct a prosperous business at 742 Carson street, where a full and complete stock of Stoves, Tin Ware, and Hardware in select variety is to be found. Capt. Geo. W. Bowers has full charge of this branch of the business. The captain is a brother to John R. Bowers, and is undoubtedly the right man in the right place. The individual members of the firm are Mr. F. A. M. Krebs and Mr. John R. Bowers. The former was born in Franklin Co., this State, in 1839, and came to this city in 1861. The latter is a native of this city, where he was born in 1834. These gentlemen have had an ample business experience, and the energy and enterprise which characterizes their business transactions, fully entitles them to a high rank among the business men of the two cities.

COCHRAN & BRO.—*Contractors & Builders, 121 & 123 Pennsylvania Av., Allegheny.*

The enterprising and well known firm of Cochran & Bro. was founded in 1865 with a comparatively moderate capital, which has since been considerably augmented. They occupy the two-story iron clad frame building 48x138 feet in size, at Nos. 121 & 123 Pennsylvania avenue, Allegheny city, as a planing mill and finishing shop, manufacturing every description of sash, doors, frames, blinds, shutters, mouldings and inside and outside finish, and are prepared to furnish estimates and make contracts for the erection of public and private buildings of every description. Their present stock of seasoned lumber and material is valued at about \$5,000, and their facilities for procuring at short notice any amount of dimension lumber and building materials required are most perfect. Their average annual business for the past two years has been about \$40,000, while in former prosperous times it has reached as high as \$200,000 per year. Their planing mill is supplied with latest and most approved machinery for the various purposes required, including one fifty-horse power engine and a sixty-horse power boiler, saws, moulding, planing and matching machines and all the appliances and inventions of the present day. From fifteen to twenty experienced workmen are regularly employed, and during the busy season a much larger force is required. The individual members of the firm are Mr. John A. Cochran and Mr. Loyal Y. Cochran, both natives of Butler county, in this State, but residents of Allegheny city since 1859. They are thoroughly practical mechanics, conversant with all the details and requirements of the business in which they are engaged, and perfectly reliable, conscientious and honorable in all their transactions. They have established a lucrative and eminently satisfactory business, which will compare favorably with that of any similar establishment in the two cities.

MILLS & BROTHER,—*Printers, Stationers and Engravers, 55 Ninth St.*

Pursuing the avocation of the art preservative of arts, no firm of Printers, Stationers and Engravers in this city have established a better reputation for perfection in work than Mills & Brother, or are more justly entitled to notice in this publication. Commencing business in 1870, under the above style, with a very limited capital, their work soon became recognized as the most desirable in typography and letter press to be obtained in Pittsburgh, and with the growth of this repute their business naturally increased, until at the present time it averages \$35,000 per annum, and gives employment to 25 workmen in its various departments. With an enlarged trade the resources and facilities of the house, for the rapid and perfect execution of work, were continually augmented, and now consist of news presses, and presses for all the various kinds of job work, folding machines, steam engine, and all the latest modern apparatus for the successful operation of a first-class general printing office. Engraving in wood or metal is promptly executed. The trade of Messrs. Mills & Brother is located mainly in the city, but those at a distance who really desire printing or engraving done that reflects the highest progress of the art, should at once address themselves to this firm.

JAMES R. REED & CO.—*Diamonds, Watches & Jewelry, 93 Market St.*

The well known and popular gentlemen comprising the above named firm, started at 36 Smithfield street, in 1847, and continued for eight years, where they manufactured mathematical instruments in connection with the jewelry business; from that location they moved to 94 Fifth avenue, where they remained for 21 years, coming to their present building, No. 93 Market street, in July, 1876. Here they carry a stock of fine jewelry valued at about \$60,000, transacting a business of not less than \$60,000 per annum. They occupy a large four-story building 22x75 feet, employing eight assistants. Their trade has steadily increased, until at the present time it is one of the leading houses of the city. They carry a large, elegant and recherche collection of diamonds, rubies, emeralds, opals, pearls and other precious stones, seal rings, cameos, plain gold bands, bracelets, brooches, charms and all manner of adornments in the way of fine jewelry, together with a large line of fine watches of the most approved workmanship and celebrated manufacture. Silverware of chaste and elegant designs from spoons and forks to epergnes and ornaments of elaborate and artistic form and workmanship. This firm makes a specialty of repairing fine watches, doing it in the best and most thorough manner. The members of the present firm are James R. Reed and George M. Reed, brothers and natives of Washington, Pa. Mr. James R. Reed, the senior partner, is now a member of Allegheny City Councils, and for twelve years he represented his ward with fidelity and credit in the City Councils of Pittsburgh.

C. H. BEACH,—*Practical Druggist, Corner St. Clair and Sycamore Sts.*

One of the neatest and most popular Drug Stores in the 32d Ward is that of Mr. C. H. Beach, on the corner of St. Clair and Sycamore streets. The location is a desirable one and the stock is of the most perfect to be found in that part of the city, consisting of Pure Drugs and Medicines, all popular and really desirable Patent Medicines, Perfumery and Toilet Articles of most popular kinds, Pure Wines and Liquors for medicinal uses, also Notions, Choice Tobaccos and Cigars. The business transacted annually will average about \$5,000. Having said this much of the general business, we will take the liberty of inserting an item of no less importance. Mr. Beach, who was born in Wayne county, Ohio, June 16, 1845, and came to this city and began business in 1867, is a thoroughly accomplished druggist and chemist, and has the highest standing among the ablest physicians for filling prescriptions. This, with his courteous attention to all and general high standing in the community, entitles him to the confidence and patronage of the public in that part of the city.

CONSOLIDATED GAS CO.—Office, No. 8 Sixth Av.

The history of the above corporation, which extends only over a period of less than a decade, is nevertheless so intimately connected with the enlargement of those facilities for the illumination of the city with unparalleled economy, as to demand more than passing recognition in this work. The Consolidated Gas Co. originated in 1871, and was incorporated under a special charter, with a capital of \$300,000. Up to this period the sole right to supply the city with gas had been vested in the Pittsburgh Gas Co., which had assumed monopolizing prerogatives, and exacted such rates as to create a deep seated aversion, which was widely exhibited toward it. The establishment, therefore, of the Consolidated was looked forward to with universal approval, and with the expectation that prevalent abuses would be at once checked and permanently abolished. In such an anticipation the public were not in error, and though every legal, technical, physical and financial influence under the control of the possessors of the field was used, without scruple, at every point to destroy the Consolidated, and hamper its operations, these means proved finally futile, and the expectations of the community were almost instantly realized by a reduction in the price of gas from \$1.85 per 1,000 feet to \$1, without doubt the cheapest coal gas furnished in the world.

The officers of the Consolidated Gas Co. are H. M. Bennett, President, D'Arcy E. Boulton, Jr., Secretary and Treasurer, and J. T. Duff, Chief Engineer. The works are located on 33d street, near the Allegheny River, and cover an area of about four acres, having a gas holder with a capacity of 200,000 cubic feet, the company having a capacity for turning out 500,000 feet per day, and being equipped with the best modern appliances for the manufacture of gas and gas coke. During the past year not less than a quarter of a million bushels of slack coal have been consumed in carrying on the enterprise, the main portion of the city and most of the public buildings being reached by a system of pipes about 20 miles in length. Nurtured in the midst of litigation, and fostered rather than crushed by opposition, the Consolidated Gas Co. has achieved a position in the popular approbation from which it can not be easily dislodged.

The officers of the company are well known in this community as prompt, reliable and thorough business men. They have been connected with the enterprise almost from its inception, and have labored sedulously to establish it upon the present satisfactory footing, and are entitled to no small commendation for the admirable manner in which they have performed their allotted duties. The "Co." is one of the prominent institutions of the Iron City, and conduces in a marked degree to the general welfare and prosperity, increasing every year its sphere of usefulness, as well as augmenting its resources.

ALBERT DIEHL,—Photographer, Mt. Washington.

It requires a combination of native ingenuity with art, and these essential qualities are thoroughly demonstrated in this work of the Mt. Washington artist, Mr. Albert Diehl, at the head of the Monongahela Incline plain. Mr. Diehl started here in business, under favorable circumstances, in 1874, and occupies one of the most picturesque and attractive locations to be found in the surrounding country, giving from his gallery a fine view of the city, the rivers and the surrounding country, such as could not fail to attract the attention and elicit the admiration of all lovers of nature and art. He keeps fine specimens of his work for the inspection of visitors, and has no fear of losing from comparison with any work done in the city. His facilities and instruments enable him to put up first-class work in every respect, and he will always be pleased to have visitors call at his rooms to inspect his work, or take observations of the beautiful scenery presented to the eye from his rooms. He occupies a two-story building, in which his reception room and operating room is 15x30 feet in size, besides additional room for chemical operations. He is the inventor of a new and beautiful picture imitation of Porcelain Ferreotype, which gives a clear, soft and natural appearance. He is now working on a plan and process to get a perfect view of the city of Pittsburgh on the background of pictures, which will be an attainment worthy of high commendation. He is prepared to take pictures in all popular styles of the art, also residences and landscape views on short notice and upon reasonable terms. Mr. Diehl was born in Germany, in 1850, and came to this city when but a child, in 1853. He first commenced business at the corner of Penn ave. and Sixth street, in 1872, and subsequently removed to this place. He is a young man of high culture, as well as courteous and agreeable to all.

THOMAS B. MORELAND, Agt.—Undertaking & Livery, Penn Av., E. E.

This is the oldest establishment of the kind in the East End, Messrs. Moreland & Mitchell having commenced in 1858. Their capital, at that time, amounted to but \$600, and when Mr. Mitchell retired in 1874, the stock and book accounts of the firm were valued at \$70,000. It is only necessary to say that his carriages, buggies and other vehicles are new and of the latest styles, while the undertaking department, which is carried on in all its branches, embalming, &c., is not excelled by any establishment in the city. Mr. Moreland furnishes coffins, shrouds, crape, gloves, etc., and also provides hearses and carriages, for all of which his terms are extremely moderate. For weddings and parties, and to accommodate ladies shopping, he furnishes Berlin coaches of the very latest style with careful and experienced drivers, and his regular carriages are models of comfort and beauty. His building is 46x140 feet and two stories high. He employs six to eight men in his stable at liberal salaries, while his stock is valued at \$5,000 to \$6,000. Mr. Moreland is a native of Ireland, born in 1829. He came to this city April 19, 1850, and in 1858 began business on Penn avenue, old 5th ward, where the public school now is, and then moved to Liberty street opposite Union Depot in 1860, and began business here in East Liberty in 1870, under the firm name of Moreland & Mitchell, until 1874. Mr. Moreland is now doing a business of about \$10,000 per year, which is of course constantly increasing as the city grows in that direction.

MANCHESTER COAL YARD,—Marshall & Thompson, Agents, Spruce & Market Sts., Allegheny.

The business now conducted by the firm of Marshall & Thompson was founded eight or nine years ago by Mr. William McIlwain and passed into the hands of the present proprietors in 1878. The original capital, which was \$2,500 has been considerably increased and the firm now carries an average stock of about \$4,000, consisting of the best grades of anthracite and bituminous coal, nut coal and slack, for family use or manufacturing purposes. Their office and yard is at the corner of Spruce and Market streets. Their annual sales amount to not less than \$20,000; nine hands are regularly employed. Mr. J. C. Thompson was born in the north of Ireland, but has resided in this country since boyhood. Mr. Alexander Marshall is a native of Scotland, but is somewhat a cosmopolite, as he has the greater portion of his life been identified or actively engaged in public work, construction of railroads, etc., in England, Ireland, Scotland, Wales, Belgium, Prussia, Russia and France, previous to his coming to this country six years ago.

JOHN KEMPER,—Boots and Shoes, 175 Center Av.

This business was originally started by Mr. Kemper and his brother in March, 1878, and since April 1, 1879, his brother having retired, the business has been carried on alone by Mr. Kemper, who keeps a good and reliable stock of Boots and Shoes for men, women, boys, misses or children and sells at very low figures. He also has a Custom Department, and will take your measure and guarantee you good stock, good work and neat fits. Repairing also neatly and promptly done. Those desiring to purchase will find Mr. Kemper a reliable and pleasant man to deal with and sure to give you lowest prices, at No. 175 Center avenue.

METROPOLITAN NATIONAL BANK,—4509 Butler St.

Among the Banking institutions of the Iron City, the Metropolitan National Bank, in the East End, is deserving of particular mention as among the more prosperous and solid institutions. The bank was first organized in 1873, as a State institution, by a number of the prominent citizens of this section, who in 1875 changed it to a National Bank. It is located in the midst of the finest business portion of Lawrenceville, and enjoys an extensive and prosperous business. D. R. McIntire, Esq., of the firm of McIntire & Brand, is President, and Capt. C. A. Dravo, Cashier, under whose careful management the Bank enjoys a high degree of popularity and public favor. The capital is \$200,000. The Board of Directors is composed of D. R. McIntire, W. T. Dunn, Jas. Robison, Jos. Vogel, Henry Daub, D. W. Riggs, E. L. Clark, J. C. O'Donnell and Jno. A. Hoffman, all of whom are men of the highest character, and rank among the most prominent citizens of the two cities. Capt. C. A. Dravo, the courteous cashier, has been connected with the Bank ever since its inception. He was its first President, in which capacity he served for a number of years, and afterwards became Cashier, and to his energy and abilities much of the success of the institution is due. He is a native of Allegheny Co., born at Elizabeth in 1824, and is a descendant of some of the earliest settlers of that section. From 1848 to 1872 he was closely identified with the river interests, and is well known and esteemed by all the river interests and men of to-day. Since his connection with the banking interests he has shown himself possessed of financial ability of a high order, and has made many new friends in his present position.

WM. A. HERRON & SON,—Real Estate Agents, 83 Wood St.

The firm of Wm. A. Herron & Son is the most prominent one in the two cities engaged in the Real Estate business, representing, as they do, over \$1,000,000 worth of property in Allegheny County, consisting of business blocks, stores, offices and private residences. Col. W. A. Herron, the senior member of the firm, has been engaged in this line of business since 1871. Mr. John W. Herron, his son, was admitted to the firm in 1876, and now has sole management and control of the business. In addition to the renting of property in all parts of the county and State, the firm devotes special attention to the management of estates, collecting rents, paying taxes for non-residents, placing insurance in reliable and responsible companies at advantageous rates, and every description of notarial business. Col. Herron is a native of Pittsburgh and was born in 1821. He has been prominently identified with the manufacturing interests and industrial prosperity of the city, and although by no means a politician, has always taken a deep and prominent interest in all matters pertaining to the public welfare in State, County or National affairs. During the two terms extending from 1862 to 1868, he held the responsible position of Clerk of Courts, and during the past year was nominated by His Excellency President Hayes and confirmed by the Senate as United States Pension Agent, with headquarters in this city. He has in every position occupied by him proved to be a genial, courteous and affable gentleman of unblemished character and irreproachable reputation. As a member of the City Council, he proved to be a true friend of the people, while manifesting a deep interest in the development and prosperity of his native city. Mr. John W. Herron is also a native of Pittsburgh, born in 1851. He has been a life-long resident of the city, previously identified with the iron and manufacturing interests. He is an active, energetic and reliable young man. He now has charge of the entire business of the firm, his father's time being devoted to his public duties.

DUFF, McKEAN & CO.—Implements & Seeds, 149 & 151 Liberty St.

Among a number of fine establishments engaged in the business of agricultural implements and seeds in this city there is no finer or more extensive house than Messrs. Duff, McKean & Co. The house was founded by Young & Murphy in 1870. They sold out to Duff & McKean in 1876, who enlarged the business and extended the trade. In 1879 they were compelled to seek more commodious quarters to accommodate their rapidly growing business, and removed to their present location, the style of the firm being changed to Duff, McKean & Co., where they occupy one of the best arranged buildings in the city for their purposes. The building is a substantial brick, 30x140 feet in size, three stories high, with commodious cellars, and they occupy the entire building with their Implements, Farm Machinery, Hardware, Seeds, etc., carrying in stock from \$20,000 to \$50,000, embracing the most popular and improved makes of all farm machinery, such as Plows, Reapers and Mowers, Threshing Machines—horse powers—and tools of every description to the smallest article are to be found at this establishment. In their Seed Department, to which particular attention is given, none but the freshest and best seeds are handled, and the firm has been successful in establishing a reputation for superiority in this branch of business of which they have every reason to be proud. The house is in every way a representative one in their line, and has risen through the indomitable energy and push of its proprietors. Their trade extends throughout Western Pennsylvania, West Virginia, Eastern Ohio and more distant portions of the country and amounts to nearly \$100,000 per annum. As illustrating the immense trade established by these gentlemen, the fact that the present season (1879) they have sold 700 of the famous Champion Mowing Machines. Mr. W. G. Duff, the senior member of the firm, is a native of Pittsburgh, and has been connected with the seed and implement trade many years formerly in connection with other establishments, acquiring during the time a thorough knowledge of the business and an extended acquaintance throughout this portion of the State. His long experience has served in no small degree to build up the business to its present large dimensions. J. S. McKean was born in the town of Dumfriesshire, Scotland, in 1850, but came to this country with his parents at the early age of two years, and was raised near the city. Prior to entering this business he had for a number of years been engaged in the gardening and fruit-growing business, and during that time acquired a practical knowledge of the needs of the agricultural community. He is a young gentleman of much energy, possessed of many generous qualities that have in no small degree served to promote his own and the popularity of the house with which he is connected. Mr. Gus. B. Young, one of the original founders of the house, is the general superintendent of the business. He is a popular gentleman so well known to the numerous patrons of the house that any mention of this house would be incomplete without reference to him. The firm of Duff, McKean & Co. in every respect is a very worthy one, the individual members being young men of irreproachable character, enterprising and reliable, and the house presents advantages not easily duplicated by any contemporaneous establishment and is most heartily commended.

ISABELLA FURNACE CO.—Man'rs. of Pig Iron, Etna Station, W. P. R. R.

The above establishment is one of the largest and most complete west of the Allegheny mountains, and was started in 1871 on a very large capital which has favorably increased, and the business now amounts to the large sum of \$1,000,000 per annum, with a stock on hand of \$250,000. The buildings are eight in number, the main building being 240 feet long by 80 in width, and the entire establishment covering 37 acres of ground. They have a capacity of 60,000 tons of pig metal per annum. The power necessary to run the works consists of 12 boilers 65 feet long and 42 inches in diameter, with five large engines of 200-horse power, the engine house being 40x100 feet. There are two large furnace stacks 75 feet high and 20 feet bosh. The company manufacture their own coke, having 200 coke ovens near Blairsville on the W. P. R. R., and also own 800 acres of coal land in the same locality. They have a force of 150 men constantly employed at the furnace, and their average pay-roll foots up to about \$1,600 per week. The works are superior to any similar establishment in the country, and are conducted and managed by men of large experience in business. Having been permitted free access to the entire works we can safely assert the same to be the most complete establishment of the kind we have ever visited. We are under many obligations to the firm for courtesies extended and information furnished.

A. M. BYERS & CO.—Wrought Iron and Lap-Welded Galvanized Iron Pipe.

Office, 98 Water Street and 132 First Avenue.

In making a detailed review of the iron trade, prominent among these will be noticed the house of A. M. Byers & Co., which from the special character of its products and the magnitude of its operations, should not escape mention in any work relating to the development, resources or staple industries of this city. Originally established in 1864, by A. M. Byers, Wm. Graff and Jacob Reese, under the style of Graff, Byers & Co., the business was prosecuted with marked success until 1870, when the title changed to Byers, McCullough & Co., who still continued a career of usefulness and prosperity till 1876, when the firm assumed its present style and status, being composed of A. M. and E. M. Byers. The plant of the concern is located on the South Side and covers an area of about five acres, being divided into several departments, made necessary by the diversity of the work and the various products manufactured, as well as to secure that high degree of perfection in every process for which the house has attained so wide a repute. Of these, the rolling mill, as preparing the material, naturally comes first, and is worthy of more than the brief attention to which our space confines us. Besides being equipped with much modern machinery and many labor-saving appliances, the mill is furnished with 26 puddling furnaces, 6 heating furnaces, and 3 trains of rolls, the annual capacity being from 15 to 20 thousand tons. Two mills for the manufacture of Butt and Lap-welded Wrought Iron Tubes and Pipe, form an important feature of the plant. Galvanizing works are also in operation, besides a large machine shop and gas works, which supply the entire establishment with gas for illuminating purposes. In these and other subdivisions of the work are employed about 500 operatives, more than three-fourths of whom are skilled artisans, necessitating a monthly disbursement for labor alone of not less than \$35,000. The requisite motive power for moving the multifarious machinery is supplied by 12 steam engines and a nest of 13 boilers in 4 batteries, this mechanism and its arrangement being considered unsurpassed for effective completeness anywhere. Five steam pumps are also required to furnish water for boilers and elsewhere in the works, and it is safe to assert that in the perfection and adaptability of all apparatus employed, this establishment is almost without a peer and is certainly excelled by none in the same branch of manufactures. The products for which the firm of A. M. Byers & Co. is particularly noted, and to which special attention is directed, are Skelp, or Pipe Iron, Sheet, Bar and Shafting Iron, Lap-welded Wrought Iron Pipe, Block or Galvanized, for Gas, Steam and Water, also Boiler Tubes of all dimensions to order, and Core Barrels, Tweer-pipe Nipples, and Patent Swedged Sockets, etc. For these goods the trade of the house is very extensive, requiring the assistance of special agents at prominent points. Mr. A. J. McDonald is the resident factor of the concern at Chicago No. 226 Lake street, Mr. John Mancely occupying a like position in Philadelphia, at No. 309 Arch street, for the convenience of Eastern buyers. As sole manufacturers of Galvanized Iron Pipe in this city, Messrs. Byers & Co. transact a large trade in this article, which possesses advantages of marked superiority over rubber coated or enameled tubing, and is yearly meeting with more favor, occasioning a rapidly increasing demand. The senior partner of the house is President of the Iron City Nat. Bank and connected with other financial institutions and enterprises of a public character, and the firm ranks second to none of its contemporaries in enterprise, public spirit, and a business policy that entitles it to the high esteem of that community which has derived such pronounced advantages from its operation.

C. G. HUSSEY & CO.—Pittsburgh Copper & Brass Works, Office, Fifth Av.

These works are located at Soho, a suburb of Pittsburgh on the banks of the Monongahela river. As the first establishment in the country devoted exclusively to the reduction of American ore, its history is worthy of special attention. In 1843 Dr. Hussey became interested in the copper territory of the upper peninsula of Michigan, and at first acquiring his title by lease and locating his claims, he purchased the property which he had located as soon as the Government placed it in the market. In 1845, with certain Eastern capitalists whose interests were identical, he formed a joint stock company entitled "The Pittsburgh and Boston Mining Company," of which he subsequently became president. The same year they opened the "Cliff Mine" on Eagle river, which established the value of the mining district of that section and produced about eight million dollars worth of copper before exhaustion. Rendering this ore into metal was at first a slow operation. There were but four smelting furnaces in the country at that date, and none were able to meet the requirements of reducing the ponderous blocks of almost pure copper produced in this region. Dr. Hussey conceived and perfected an idea whereby these heavy blocks, sometimes weighing four or five tons, were deposited in the oven of the reverberatory by means of a movable top, which he proceeded to practically test by erecting the Pittsburgh furnace in 1850. The success was so complete that the improvement was adopted by every furnace using Lake Superior ore. The mines from which the raw material was obtained have of late been exhausted, the metal at present being obtained from smelting works on the lakes and is received in flat blocks weighing about one hundred pounds each. These, after being heated and reduced to the required thickness by passing through rolls, have the oxide which forms upon the surface from contact with the air removed by a process peculiar to these works. This process, though simple, requires great experience and skill in its proper manipulation. From one to three hundred hands are here constantly employed, being mostly Welsh from the Swansea district. The brass foundry contains ten furnaces. The copper and zinc placed together in crucibles in such proportion as will produce the best quality of brass, and when melted the metal is moulded in flat cakes, which after being annealed in an oven are rolled into whatever thickness of sheet is desired, the oxide being removed and the product left pure and ready for market.

WM. W. NISBET,—Druggist, Washington Av., 31st Ward.

Mr. W. W. Nisbet is located on Washington avenue, in the 31st ward, better known perhaps as Allentown, where he is engaged in the retail drug and prescription business. He owns and occupies a handsome two-story frame building 40x50 feet in size, and carries a large and varied stock of drugs, chemicals, toilet and fancy articles, perfumery, paints, oils, varnishes, etc., making a neat display and where he is doing a prosperous and growing business. Particular attention is given to his prescription business, Mr. N. being a thoroughly skilled and conscientious pharmacist. He began business in 1872 near his present location, but the following year he purchased his present fine location and removed to it. Mr. N. was born in Freeport, Armstrong county, and has been a resident of this county twelve years, he came to this city in 1872 and located in Allentown, where he has continuously remained and met with flattering success. He is a popular, enterprising and public-spirited gentleman. In 1874 he was elected a member of the common branch of city councils, in which body he served two successive terms; in 1875 he was elected to the select branch of councils, and is now serving his second term in that body. He was elected in 1879 a member of the central board of education, a fact that shows his efficient and faithful performance of duty.

GEORGE SANDS,—Plumber, Gas and Steam Fitter, 85 Franklin St.

With a thoroughly practical knowledge of this business, Mr. Sands started in 1867, and by his excellent and reliable work has succeeded in establishing a permanent and remunerative patronage throughout the city and surrounding country. Mr. Sands is careful to employ none but competent assistants and can therefore guarantee all work to give satisfaction, either in Plumbing, Steam or Gas Fitting, or any work pertaining thereto in public halls, churches or private residences or general repairing. Orders will receive prompt attention. Those desiring work of this character will do well to consult Mr. Sands at No 85 Franklin street.

SOLAR IRON WORKS,—Wm. Clark & Co., 35th & Railroad Sts.

When we glance at the almost innumerable advantages which Pittsburgh possesses, her geographical position and river facilities, commanding an inland navigation of many thousand miles, her artificial facilities for transportation—being the railroad centre of numerous lines diverging in all directions, her immense iron capital consisting not only of money but of mills, furnaces, ore banks, iron mountains, coal mines, inexpensive fuel from her numerous gas mills, and what is of vastly greater importance, her hosts of skilled, enterprising and thoroughly practical mechanics and iron workers, familiar with the constitution and capabilities of iron from the crude ore to its perfected forms. To her skilled iron workers and able artificers is Pittsburgh largely indebted for the proud and prominent position she holds to-day among the cities of the land, and in a work designed to give a brief history of this great centre and a detailed sketch of her numerous, vast and wonderful establishments. The Solar Iron Works and the accomplished head of the establishment, Mr. Wm. Clark, are deserving of more extended mention than is accorded to many cotemporaneous establishments. Mr. Wm. Clark is the only living male member of the well known firm of William Clark & Co., proprietors of the Solar Iron Works, at the corner of 35th & Railroad streets. These extensive works as complete of the kind as in the United States, were established by William Clark, his brother Edward Clark, and his brother-in-law Charles Fownes. The premises occupied by this firm cover an area of nearly three acres at the location above named, extending from the railroad to the Allegheny river, with two buildings, each 130x150 feet in size, filled up with the most perfect and complete machinery, appurtenances and appliances to be found in any establishment in this county, with seven steam engines of from 10 to 300-horse power each, seven large boilers, single puddling furnaces, five heating furnaces, five trains of rolls, and every description of heavy and light machinery of the most approved patterns and designs required in the various departments of the business. Two hundred and fifty workmen, (many of them skilled hands), are regularly employed and the average weekly pay-roll aggregates \$5,500. The special productions of this establishment is hoop, band and scroll iron in all the various forms and styles, and the celebrated Delta Cotton Tie, the invention of Mr. Wm. Clark, an article which is pronounced by planters and packers emphatically the best in use. Their trade extends all over the United States, North, South, East and West, and amounts to not less than \$450,000 per annum. The capacity of the works is about 10,000 tons of finished work. Certificates of merit have been awarded the Solar Iron Works at various times and at the International Centennial Exhibition at Phila. in 1876. A bronze medal and certificate of award was given for hoop iron and the Delta Cotton Tie. Two silver medals have been awarded by the Cincinnati Exposition Society, and testimonials innumerable as to the superiority of their products have been received by the firm. Mr. Chas. Fownes and Mr. Edward Clark have both died since the organization of the firm, but the name and style remains the same, and their estates are still represented in the firm. Mr. William Clark is a native of England, but has resided in this country for a number of years. Although yet a young man, he is younger in appearance than in fact, and has been all his life identified with the iron business, having commenced working in an iron mill at an early age, and ever since that time he has been closely identified with the iron industry, and has practically mastered it in all its scientific and mechanical departments, acquiring a thorough practical knowledge and insight of every department of the business as he proceeded to the prominent position he now holds as one of the leading representative manufacturers of the Iron city. He has been a resident of Pittsburgh since 1841, and the city of his adoption may well point with justifiable pride to this noted establishment and its enterprising head as proof of what may be accomplished by a life of industry, probity and devotion to his chosen occupation. The Solar Iron Works in its particular branch presents advantages not to be excelled.

PITTSBURGH CATHOLIC COLLEGE,—No. 98 Wylie Av.

Among the various educational institutions of Pittsburgh the Catholic College, located at No. 98 Wylie avenue, is entitled to a prominent position in a work of this description. This college was established on its present solid basis in October, 1873, although colleges with various names had previously been attempted with indifferent success. The present college has been established under the high patronage of the Rt. Rev. Bishop of this diocese, and is conducted and directed by the fathers of the Holy Ghost and the Immaculate Heart of Mary, an order of educated men who have devoted their entire lives to the cause of educating and christianizing the human race. The order is now conducting a large number of colleges and academies throughout Europe and Africa. The object of the Pittsburgh Catholic College is to offer to Catholic parents an opportunity of sending their children to a school where the religious and moral training of the pupils is combined with a thorough instruction in every branch of liberal education. The children of parents of other denominations are admitted on equal footing with the children of Catholic parents, and while they receive the most liberal education, religious instruction is being left entirely at their option. A strict and effective, yet mild system of discipline is maintained, and the spirit of emulation is excited among the pupils by periodical examinations and the distribution of honorary certificates to the most deserving. Monthly reports on the conduct, application and progress of students are submitted to the parents. The course of classical studies embraces the English, Latin, Greek, German and French languages, history and geography, mathematics, physics and chemistry, astronomy and the natural sciences. In the commercial course particular attention is devoted to English grammar and composition, bookkeeping, correspondence in English, German and French, commercial law, practical arithmetic, geography and history, political economy and penmanship. The preparatory course embraces grammar, spelling, reading, arithmetic, geography and penmanship. Instruction is given in drawing and vocal and instrumental music by competent and talented professors. The system and mode of instruction is far more thorough and practical than that afforded at any other college, and students in either of the languages are instructed by a native of that particular country, and ordinary conversation is conducted in that language, thus ensuring correct pronunciation and a thorough knowledge of the idioms and peculiarities of that tongue. The number of professors at present engaged in this college is ten, each one being a thorough master of the special branch to which he devotes his attention. The number of pupils enrolled at the last term was 90, but a much larger attendance is confidently expected during the coming year. The closing exercises of the first term, which were held at the Fifth Avenue Lyceum on the afternoon of Tuesday, June 30th, gave ample proof to the public of the thorough and excellent method of instruction pursued at this college. The course of studies will be resumed on Monday, Sept. 1. During the comparatively brief period in which this school has been in existence, the directors have every reason to feel highly gratified and encouraged by what has already been accomplished, and at the prospects for the future. The order is even now contemplating the erection of a spacious and elegant building expressly for college purposes, with modern improvements and ample facilities for the accommodation of a large number of students. Full information and particulars may be obtained upon application to Rev. P. W. Powers, President, or Rev. J. Graff, Vice President of the college, at No. 98 Wylie avenue.

KUHN BROS.—Wholesale and Retail Grocers, Penn and Frankstown Aves.

Conspicuous among the leading Wholesale and Retail Groceries of the Iron City is the well-known firm of Kuhn Brothers, whose excellent management and high business qualifications entitle them to honorable mention among the leading business houses of the city. The business of the house was started in 1874. They now carry a stock of Staple and Fancy Groceries and Provisions amounting to about \$4,000, while their annual business transactions will foot up to about \$60,000. Their business is located on Penn and Frankstown avenues, where they occupy a room 21x84 feet in size. James C. and Harry P. Kuhn are widely and favorably known as gentlemen as well as prompt and accurate business men. Mr. James C. Kuhn was born in Allegheny county in 1847, and Mr. Harry P. Kuhn in this city in 1857. This house is destined to become one of the leading business establishments while under their control.

PITTSBURGH ENCAUSTIC TILE CO. (Limited).

Office and Works, corner Bluff and Gist streets, Fourteenth Ward.

Among the manufacturing interests and business enterprises of this city, we cannot fail to make liberal mention of the Pittsburgh Encaustic Tile Company (Limited), Office and Works situated corner of Bluff and Gist streets, Fourteenth Ward. This Company is not only conducted in the most able and enterprising manner, but presents as well an article most thoroughly and practically adapted to the uses for which it is made—viz., the manufacture of Floor Tile of the most desirable character. The business was originally started by a limited stock company in 1876 as the pioneer company of the United States, with a capital of \$4,000, which was afterwards increased to \$10,000, and subsequently again increased as other changes have taken place under reorganization. This company is now prepared with ample capital and every facility for prosecuting a thriving business, and have on hand from 15,000 to 20,000 square feet of most superior tile, with a capacity of manufacturing 1,000 square feet per week. While they are met with a large and increasing business, they feel justified in the assertion that they can fill promptly all orders upon the most liberal terms, as their ground room yet unoccupied affords them the ability of still greatly increasing their facilities. This is an enterprise embracing artistic and ornamental work, deserving the fostering care and encouragement of the city and surrounding States, as its sales extend throughout the entire country. This peculiar tile was, previous to the organization of these works, entirely obtained from foreign countries, while the article here made is pronounced by critics far superior to that of foreign manufacture; and consequently, this establishment is insured a large and increasing business which will compare favorably with the most prominent manufacturing establishments of this city, both in its utility and management. The slip house covers an area of 60x80 feet; the furnace building is 35 feet square; besides this they have a third building for other purposes 30x90 feet in size, and a large amount of vacant ground room. They employ one 16-horse power engine and boiler of larger capacity, and a large force of competent workmen. They have four color mills of various sizes, one dust mill, one cracker or breaker, one plunger, each perfectly adapted to its special work. They have two large tanks, 7x14 feet in size, dumping bed 8x20 feet, one drying kiln 5x30 feet, one eleven feet square, and three presses of 10 tons, 145 tons, and 75 tons pressure. In fact, these works embrace the most improved and complete appliances for the manufacture of Encaustic Tile in all the different colors, which must completely drive the foreign article from the market. The individual members of the firm are, Joseph Rowell, business manager, a native of England; Mr. John Parkin, also a native of England; both have been in this country many years, and Mr. Alexander Flowers, who is a native of this State—a thorough and practical workman. Too high praise cannot be awarded this Company for the success of an industry which must crown their labors with success and redound to the credit of our large manufacturing city. The original stockholders of the Company were, Joseph Rowell, John Parkin, Frank Wright, Mr. Conard Wm. Carlidge and Samuel Keys. The latter is a scientific operator and familiar with all the various departments of the business. After the works were partly built, Mr. Carlidge sold his interest out to Mr. E. Conard, which created some dissatisfaction and resulted in crippling the progress of the operations for about two years, subsequently resulting in the formation of the present Company, which holds a diploma from the United States Government for superior quality of work. Those interested will do well to call and see samples at these works, or in the Boatmen's Insurance Company's rooms, at the U. S. Postoffice and other public edifices, and at the U. S. Capitol Building, Washington City, D. C., where two floors are laid with the product of these works.

IRON CITY COLLEGE,—J. C. Smith, A. M., Principal; Cor. Penn Av. & 6th St.

No man, young or old, is fitted to go out into the world without a knowledge of book-keeping and the principles of commercial law. The "Iron City College," located at the corner of Penn Avenue and Sixth Street, was incorporated in 1855 with the object in view of fitting young men with a thorough practical education for active business life. Its patrons are, and have been among the most intelligent and successful business men of Pittsburgh and Allegheny and of the entire country. A large proportion of the successful merchants of the two cities received their business education here, and many of the leading and most influential bankers and business men are graduates of this popular institution. The whole number of students matriculated since the organization of the Iron City College is between 19,000 and 20,000, representing every State in the Union. The course of study, which is eminently thorough and practical, embraces Penmanship, Arithmetic, Rapid business calculations, Commercial correspondence, Book-keeping in all its forms and applications by the most approved methods, Practical banking, Lectures on Commercial law, Political Economy, Business Customs, Usages, &c. The method of instruction is chiefly individual, there being no class arrangements and no one is dependent on another for his progress. The time for completing the course is not fixed and each student is allowed all necessary time within reasonable limits for completing his studies. The institution, which has been in continuous and successful operation for a quarter of a century, offers every possible advantage for the acquisition of a complete theoretical and thorough practical business education. It is open at all seasons of the year, and students are admitted at any time. Prof. J. C. Smith, the talented principal of this college, has had more than forty-five years experience as an educator and for the past twenty-two years at the head of this institution, previous to which time he was successively principal of the Union School in Rome, N. Y., Professor of English Literature in Carlisle Seminary and Professor of Mathematics in Fairfield Seminary, two large and flourishing institutions of learning in New York State.

SHOE & LEATHER BANK,—78 Fourth Av.

The Shoe and Leather Bank of Pittsburgh was incorporated under the laws of the State of Pennsylvania in March, 1872, with a capital of \$200,000. The first officers of the Bank were Geo. H. Anderson, now postmaster of Pittsburgh, as president, and John D. Fraser, cashier. Since its organization the affairs of the bank have been conducted with marked ability, and it to-day possesses the confidence of the mercantile community to a remarkable degree, and its transactions are eminently satisfactory to all parties interested. The present officers of the bank are as follows:—Daniel R. Davidson, President; M. W. Rankin, Vice President; John D. Fraser, Cashier; Daniel R. Davidson, M. W. Rankin, Joseph H. Borland, Thos. J. Craig, Calvin King, Jacob S. Reamer, John Thoma, Conrad Dietrich, Geo. J. Luckey, Directors; W. F. Church, Teller, and H. W. Bickel, Bookkeeper. The Eastern correspondents of the Shoe and Leather Bank are, in New York the Fourth National Bank, and in Philadelphia the Second National Bank.

ANDREW THOMPSON,—Flint and Green Glass Moulds.

90 Eighth St. and 724 Washington St., South Side.

The first establishment in Pittsburgh devoted to the manufacture of flint and green glass moulds, presses and light machinery and mechanical appliances for the production of glassware, was founded in 1847 by the firm of A. J. Miller & Co., who were succeeded two years later by Mr. Andrew Thompson, who for the past thirty years has carried on the business and built up a trade which will compare favorably with that of any similar establishment in the country. He now occupies the two-story building 24x40 with blacksmith shop adjoining, at No. 90 Eighth street, South Side, fitted up with all the requisite machinery and appliances for conducting the business in all its varied departments; the machinery is propelled by one twelve-horse power engine. Mr. Thompson was born in Ireland, November 1818, but came to this city with his parents before he was one year of age. For over sixty years he has been a resident of the Smoky city and is a skilled workman. He is doing an excellent business and is a worthy and reliable gentleman.

PARAGON OIL & GREASE WORKS.—*W. J. Smith & Co.,*

Railroad near 28th St.

The manufacture of lubricating and machine oils and axle grease is carried on to a much larger extent in Pittsburgh than is generally supposed. The product of our enterprise in this line finds a ready sale in our own manufacturing and in every section of the United States where machinery is employed. The "Paragon Oil and Grease Works," as they are now known, were originally founded in 1867 by Mr. Wm. Smith, at Sharpsburgh, Allegheny co., where he occupied extensive works and built up a large and flourishing trade. In the Spring of 1879 the works were removed to the present location, corner of Railroad and 28th streets, assuming the style of the Paragon Oil and Grease Works. In 1878 Mr. Wm. Smith transferred a one-half interest in the business to his son, Mr. W. J. Smith, and in the following year disposed of the remaining half interest to Mr. H. L. Harbison, the firm name and style becoming W. J. Smith & Co. The works cover an area of 47x120 feet, and are supplied with kettles, boilers, furnaces and all the appurtenances and appliances requisite for carrying on their extensive business. Among the products of this house we may mention all grades of rolling mill, ear and wagon axle grease and lubricating and machinery oils, yellow cold roll and black cold roll hot neck grease and white axle grease. All these articles have been thoroughly tested and highly recommended for the various purposes for which they are intended by leading manufacturers throughout the United States. Mr. W. J. Smith is a native of Pittsburgh, born in 1856; prior to engaging in the present line of business he was connected with the newspaper press of this city and was well and favorably known in journalistic circles. Mr. H. L. Harbison was born in Blair county, Pa., in 1852, coming to Pittsburgh in 1879 to embark in this line of business, having previously been engaged chiefly in agricultural pursuits. Both members of the firm are active, stirring and energetic young men with more than ordinary business qualifications. They are doing a safe, lucrative and satisfactory business, with most excellent and flattering prospects for the future.

WM. PEOPLES,—*Stair Builder, 142, 144 & 146 Webster St., Allegheny.*

This business was established by the present proprietor in 1856 on a very moderate capital. The building occupied is a three-story frame 80 feet front on Webster street extending back 100 feet, and was built with a view to the requirements of the business for which it is used. It is furnished within with all the latest and most improved machinery for turning out work in this line. Mr. Peoples is a practical mechanic and gives his personal attention to the establishment and its operations. The work done here is principally stair building in all its branches, and a very large percentage of the fine stair cases, especially those made in costly wood, erected in Allegheny, Pittsburgh and in the cities and towns for miles around, have been furnished from this shop; probably no concern in the country has better facilities for turning out first-class work in this line. Mr. Peoples is an accomplished carpenter and joiner, at which avocation he has given several years' service; the stock carried amounts to about \$5,000 and at present a force of ten hands is employed. Mr. Peoples is a native of Allegheny county, in this State, was born in 1831, and is well and favorably known personally as a gentleman of high and honorable character and excellent business qualifications. This establishment and its able management will bear comparison with any similar institution in the country and is worthy of most favorable consideration from the thousands of readers of this work.

THE URSULINE ACADEMY,—*Cliff Street.*

The young ladies' academy, under the care of "Les Dames Ursulines" or the Ursuline ladies, is at present located on Cliff street, Pittsburgh, and is in a most prosperous and flourishing condition. The situation is well adapted by its elevation and salubrious air as well as by its comparative retirement for the purposes of a school of this description, but the success which has thus far attended the efforts of the ladies in charge has rendered it necessary to secure even more commodious quarters, and the community has recently purchased at Oakland an elegant and attractive site upon which to erect an academy of sufficient dimensions. The order of "Les Dames Ursulines" was founded at Brescia, in Italy, in 1532, by St. Angela, and was recognized by the government in 1535. The new order spread rapidly throughout Europe and towards the year 1639 was introduced into the Western Continent. The community of Pittsburgh was founded in 1870 by a small number of French and English ladies, who being authorized by the Cardinal Arch-Bishop of Rouen, came over from France at the time of the Franco-Prussian war. Eight ladies of this devoted band, driven from their convent by the threatening storm of war, arrived in Pittsburgh in 1870 and were graciously received by the Rt. Rev. Bishop Dominec, who most kindly afforded them his protection; after remaining nearly a year in a small establishment on Eighth street they removed to their present location. The new buildings to be erected on the Oakland site will be specially adapted to the requirements of the order, and will accommodate a much larger number of pupils than the present establishment. The Lady Superioress is Madame Marie Alphonse, a member of one of the ancient families of France. The plan adopted by the Ursuline ladies for the instruction of their pupils is for its special object the development of the mind and heart. In most cases the ladies discard the ordinary text books except for reading, reference, &c. Pupils may enter the academy at any age between five and twenty, but it must be understood that a child cannot complete her education under a certain number of years, which it is of course impossible to determine until the teacher has acquired a thorough knowledge of the capacity and intelligence of the pupil. The course of instruction comprises six classes, each carefully arranged to meet the wants of the student in regular progressive steps from the rudiments to the highest branches of English literature and classical lore. When a pupil has accomplished the six classes comprising the regular course, she is permitted to pass a public examination in the branches taught and receive a gold medal and diploma as a graduate of the second degree. In order, however, to receive the highest honors of the institution and a diploma of the first degree it is necessary for the pupil to enter the superior course, which comprises the following extra branches: Logic, Literary Essays, Literature—English, American, French and German; Versification, Philology, Universal History, Chronology, Ethnology, Physiological and Geographical Botany, Geology, Mineralogy, Metallurgy, Geometry, Numismatology. Besides the course of English instruction particular pains are taken by the ladies to render their pupils proficient in the French language, for this purpose they are required to converse in French during the recitation hours and at table, except on Saturday and Sunday. Two examinations take place every year, one at the end of each session, they are partly oral and partly written, including all the principal branches of study pursued during the course of the scholastic year. Besides monthly examinations, the pupils are required every week to write out in their own style a narration of the facts of any particular history they may have been studying. In order to excite emulation among the pupils, medals are awarded every month to those who have attained the highest number of marks in each branch; musical reviews take place every three months. Pupils not desirous of fulfilling the complete course of study can nevertheless obtain a gold medal before leaving the academy, provided they give full satisfaction both for conduct and application. Great attention is paid to the exterior deportment and polite manners of the young ladies, in order to fit them for entering any society in their own country or in Europe. They receive lessons frequently in this important branch of education and are taught the smallest details with regard to etiquette and good breeding. Great care is also given to the health of the pupils and the ladies make a point of acting in every way towards them with maternal tenderness. The system of good marks and other rewards forms the ground work of the education given by the Ursuline ladies, and their mild treatment of the young seems to be the secret of their success. Gentleness combined with firmness is the leading principle of their government, and no punishment whatever is inflicted except the privation of a certain number of good marks or of a certain reward. The pupils thus attach immense importance to these marks, and will make every effort to merit them. They are taught to respect order and authority, thus forming their character for after life. We have thus given to the public a brief sketch of one of the most worthy and best regulated institutions for the education of all classes regardless of religious faith. We can cheerfully recommend the Ursuline Academy to guardians and parents.

GREAT WESTERN HAY, GRAIN & FEED HOUSE.

JAS. GRAHAM & SON, 364, 366, 368 & 370 Penn Av.

Among the various houses engaged in handling hay, grain and feed in Pittsburgh is that of Messrs. James Graham & Son, whose extensive establishment is located at Nos. 364, 366, 368 & 370 Penn avenue, 100x100 feet in size. This house was founded more than forty years ago, and has been conducted by the present proprietors for about fifteen years, and is to-day the largest establishment of its kind in the two cities. During the year ending May 1st, 1879, these gentlemen handled 318 car loads of oats aggregating 213,000 bushels, 122 car loads of shelled corn or 51,850 bushels, 47 car loads of ear corn or 16,450 bushels, 77 car loads of hay aggregating 6.3 tons, 31 car loads chop feed or 372 tons, 22 car loads of bran or 242 tons, and 36 car loads of middlings amounting to 432 tons. These are the only kinds of grain and feed handled by this house. In addition to their grain business they are also dealers in anthracite coal; this branch of their trade is growing steadily and has already assumed large proportions during the past year. Three thousand two hundred tons were handled by them, the demand so far being all local, they deliver promptly to order to all parts of both cities at the lowest ruling market quotations. Both members of the firm are natives of this State and have been for many years identified with the business interests of Pittsburgh.

JOSEPH KIMMEL & CO.—Druggists and Pharmacutists, Penn Av. & Ninth St.

Mr. Joseph Kimmel, whose establishment is located at the corner of Penn avenue and Ninth street, is a thoroughly competent Pharmacist and Druggist of long experience in the business, and employs only educated and practical assistants who pay especial attention to compounding physician's prescriptions and family recipes, using only such ingredients as are known to be of the proper strength and purity. He keeps in stock at all times a complete assortment of the best and freshest Drugs and Chemicals, Patent Medicines, Fine Perfumery, Toilet Articles, etc., making a specialty of Rare Drugs and Chemicals seldom found with ordinary apothecaries, carrying a stock of about \$10,000. The present proprietor has been engaged in this corner since 1876. The building was erected especially for the drug business and possesses all the modern conveniences. The store room proper is 25x60 feet; the upper portion of the building is occupied by him as a residence. Their trade, which is generally of the better class, will compare favorably with that of any similar establishment in the two cities. Mr. Joseph Kimmel, the active partner in this popular house, was born in Pittsburgh Oct 20, 1847. Mr. S. S. Holland, the well-known druggist of Smithfield street, is a special partner.

W. S. SMITH,—Undertaker and Embalmer, 39 Ohio St., Allegheny.

The establishment of Mr. Smith and his stock of burial cases, caskets, shrouds, &c., will compare favorably with the best. Mr. Smith has had long experience and will give entire satisfaction in all branches of the business, and is unsurpassed in the art of embalming. He was born in Allegheny in 1832; first engaged in business in the Diamond in 1850, but retired from the same to engage in the employ of the A. V. R. R., where he remained until 1854; he was one of the first conductors on that railroad. Resigning this position he engaged the employ of Adams Express Co. until 1862, after which he engaged in the grocery business. He afterwards entered in the undertaking business under the name and style of Rodney & Smith, which was dissolved in November 1876 by the withdrawal of Mr. Rodney, Mr. Smith continuing the business at the old stand. The building is a large three-story brick 20x100 and of neat and commanding appearance. The business has increased largely and now amounts to the comfortable sum of \$5,000 per annum.

J. T. EVANS,—Marble and Stone Cutter, Cor. Washington and Webster Av's.

This business was originally started by Mr. J. T. Evans in July, 1877, with a comparatively small capital, but which, by his superior skill as a workman and industry and integrity as a man, has been largely increased. He keeps constantly on hand a supply of both Foreign and American Marble and Granite, also other qualities of stone, or can supply Monuments, Headstones, Slabs or Building Stone upon the most liberal terms and guarantee workmanship of the most superior character. Those desiring anything in this line will do well to consult him, at the corner of Washington and Webster avenues. Mr. Evans employs only skilled workmen, and being practical and prompt in all his transactions, is worthy the esteem and patronage of all. He was born in Lehigh county, this State, in 1849, and came to this city in 1871.

A. JACKMAN & SONS,—Exchange Livery Stables, 174 to 184 Penn Av.

The mammoth Livery Stables of this firm present a fine display and equally fine equipage. The business was started thirty years ago by A. Jackman, Sr., who conducted it with eminent success, which secured him a wide popularity. The firm is composed of himself and sons, A. Jackman, Jr., and E. F. Jackman, each of whom have a thorough knowledge of the business. Their stables are classed with the largest in the United States, covering ground 150x150 feet, and are equipped in the most approved and thorough manner. All the members of the firm are natives of Pittsburgh, courteous and efficient gentlemen and business men.

OTTO E. HEINEMAN,—Watchmaker and Jeweler, 118 Ohio St., Allegheny.

One of the most energetic and enterprising young business men of Allegheny City is the above named watchmaker and jeweler, doing business at No. 118 Ohio street. Starting in business in April, 1878 with no capital, excepting a thorough knowledge of his trade, he has built up a yearly business valued at \$2,500 to \$3,000, and his stock in trade, consisting of Watches, Clocks, Jewelry, etc., of the latest and most fashionable styles, is estimated to be worth \$1,500, while his capital is now \$1,000. Mr. Heineman makes a specialty of watch repairing, and his workmanship in this department is unexcelled for neatness and durability. Born in Saxony, Prussia, June 26, 1853, the subject of this notice came to this city in 1870, where he learned his trade with R. Siedle, on Fifth avenue. Judging from his past success, it is safe to predict for him an equally satisfactory future, while he fully merits the liberal patronage and increasing business he receives.

WM. MAHLER,—Watches, Clocks, Jewelry, Silverware, 149 Federal St., Allegheny.

Wm. Mahler was born in Baden, Germany, in 1826, and emigrated to this country and settled in Allegheny in 1848. He was for a long time engaged in business on Chestnut street, but removed to his present place some years ago. Mr. Mahler is a practical watchmaker and jeweler. His store is located three doors above City Hall, on Federal street, Allegheny. His long experience in business enables him to give entire satisfaction to all. He keeps a full line of Watches, Clocks, Jewelry, &c., which will compare favorably with any in the city, and his business is on the increase. Remember No. 149 Federal street, Allegheny, three doors above City Hall.

IMPROVED MERCANTILE AGENCY,—Of The Bradstreet Company.

Pittsburgh Office, No. 80 Fourth Ave.

As an institution protective of the industry of others, a history of the mercantile and manufacturing progress of Pittsburgh could not be worthily recorded without mention of the above organization. Originated and established in New York City in 1849, by J. M. Bradstreet & Son, it became an incorporated company in 1876. A branch office was opened in this city more than twenty years ago, which in its labors during the period that has elapsed, has done as much to foster and conserve the solid and substantial interests of the community as any other one institution. With an inception that was almost obscure and generally regarded with disfavor, the Agency, from the absolute force of its utility, has grown to proportions that extend to the utmost limits of our commerce and trade, keeping a wholesome check upon the evils of an indiscriminate credit system, and protecting honest industry throughout the entire ramifications of the mercantile world. Such being its record, it is not strange that from the earliest period of its establishment in this city, it should have inspired confidence, and to-day occupies a position in the community, indicative of the most signal success in its undertakings. Not only in the publication of four volumes annually, containing the names and financial responsibility of every firm and business man in the United States and Canada, have The Bradstreet Company performed a stupendous work, but in the perhaps more important details of their labor, such as the compilation of special and elaborate reports, and the collection of the records of legal actions of a fiduciary character, is displayed the true usefulness and magnitude of their operations. The company have offices in all the larger cities of the country, and an almost innumerable host of special agents, correspondents and attorneys in every town, hamlet and county, which afford the patrons of this enterprise an almost certain protection against loss, and a safety in the transactions of business hitherto unknown. M. Charles F. Clark, the President of the Company, has been identified with the Agency almost from its inception and his large experience gives him a thorough knowledge of the wants of the commercial world, and the present exalted position which the Agency holds in the estimation of the business public is largely owing to his unceasing labors. For three years Mr. S. N. Dickey has managed the Pittsburgh office, and for more than ten years he has here been connected with the agency. A large force of employees is required in the various departments, which are conducted with promptness and thorough efficacy, embracing a field included in Western Pennsylvania, Eastern Ohio, and a large part of West Virginia, and is in every sense entitled to the support of the commercial community. The officers of the company are at present, Charles F. Clark, President, Henry C. Young, Secretary, and Edward F. Randolph, Treasurer, with offices at 279, 281 & 283 Broadway, N. Y. City.

THE PITTSBURGH STEEL CASTING CO.

Manufacturers of Improved Steel Castings. Office and Works, 26th & Railroad Sts.

The great improvements that have taken place during the past decade in metallurgical science, and more especially with reference to the manufacture and conversion of steel, finds a striking exemplification in the enterprise of the Pittsburgh Steel Casting Co., a corporation chartered in 1871, and conspicuously prominent among the most extensive establishments in Pittsburgh. The efforts of this company have been directed exclusively to the better production of Steel Castings for Railway, Agricultural and general mechanical appliances, and to attain the required degree of perfection much time, labor and capital has been spent, with final results, however, of the most satisfactory character. In possession of complete facilities, and all the advantages secured by the application of the best modern apparatus, as well as a profound, practical and theoretical knowledge of the conversion of steel and its properties, the company has for many years held a pre-eminent position as manufacturing castings, which, for all essential purposes, are regarded as flawless. By ingenious methods of moulding (processes secured to the company exclusively by patent) castings are made of the nicest accuracy, surfaces without roughness, uniform in quality and tensile strength, which, by the most critical tests, is ascertained to be from 65,000 to 90,000 pounds per square inch. Nor is this all, for these castings are made of any desired grade, with reference to ductility, and are capable of being welded or forged, and manipulated under the hammer as readily as any steel made. The plant of the Pittsburgh Steel Casting Co. is located on 26th and Railroad streets, and consists in part of one main building of brick, with iron fire-proof roof, 256x122 feet, occupied by the crucible, annealing and heating furnaces, hammers and casting appliances. Besides this extensive structure there are numerous other buildings, a gas producing house, 40x50 feet, a drying oven house, 50x86 feet, and a pattern shop, 40x25 feet. In the melting department are two 24 pot Siemens's regenerative furnaces, and six coke holes of eight pots each, each pot having capacity for 88 pounds of metal, and each furnace capable of making six heats every 24 hours, giving a total product of 24 net tons per day. No cast iron is used in the manufacture of this steel, wrought iron and steel alone are employed, the mixture being entirely under the control of the melter, who, by the proper regulation of his metals, can secure any desired grade of product. In the casting of Reaper and Mower Guards, Plow Shares, Plow Mold Boards, Plow Jointers, Plow Landslides, Bevel and Spur Wheels, Guides, Spindles, Dies, Cross Heads, Cranks, Rods, Straps, Links, Pulleys, Rocker Arms, Rail Road Frogs and Crossings, and machinery castings of all descriptions, the company has achieved a reputation that has led to the extension of its trade over the entire United States. The officers of the corporation are James Irwin, Esq., President, Henry W. Patterson, General Manager and Treasurer, and Wm. Hainesworth, Superintendent, and under the management of these gentlemen the company has entered upon a career of success that augurs well for its future usefulness and prosperity. A great enterprise promoting the industrial welfare of the community to the highest degree, and developing the resources of the steel manufacturing interests, the Pittsburgh Steel Casting Co. is justly entitled to the elevated position it has acquired, and the endorsement, alike of its cotemporaries and the public at large.

N. H. SNIDER,—Dealer in Groceries and Produce, 2400 Sarah St.

This establishment was started by Mr. Snider as early as 1873, first as a cigar and tobacco store, but he subsequently changed into the present business in 1877, and since then he has established a very fair and prosperous trade in Groceries, Provisions, etc. He keeps a full stock and general variety of the best class of goods, Choicest Family Flour, Fresh Butter and Eggs, Sugars, Coffees, Teas, Canned Goods, Spices, Notions, Cigars, Tobaccos, etc. at lowest prices. He occupies the first floor of a three-story brick building of ample size and conveniently located at 2400 Sarah street. Mr. Snider was born in Franklin county, Pa., in 1823 and came to this city in 1844, where he has resided ever since. He held the office of Chief Burgess of the Borough, in 1860, of East Birmingham, before its incorporation into this city.

WM. SEMMELROCK,—Undertaking and Livery Stables, 1720 Carson St., S. S.

Mr. William Semmelrock is one of the leading Livery men and Undertakers of the South Side. He started the business several years ago on a small capital which he has since increased to meet the demands of his growing trade. He has a good stock of horses and vehicles of most improved makes and a full line of Undertaker's goods. His place of business is No. 1720 Carson street, where he occupies a two-story frame building 24x60 feet in size. He was born in Germany in 1826, and came to this city in 1848, where he has been ever since. He is doing a good business, which is annually increasing and will continue to increase so long as he continues to control it. Mr. Semmelrock always keeps a full stock of Horses and Carriages, all of the first class and quality. His charges are moderate. He is a first-class business man, always accommodating, and giving his personal attention to all his affairs.

S. V. ALBEE,—*Practical Business Photographer, 99 Fifth Av.*

The tendency of an occupation of this nature is to develop in the artist the most critical and analytical distinction of lights and shades; but only that native genius which belongs to the true artist can properly comprehend the true effect of each in its exact relation to the subject. Indeed, the practical business photographer can only secure the highest results from the possession of those normal qualities which comprehend the adaptation of science to art. These reflections are the result of a brief consideration of the superior skill exhibited in the work of Mr. S. V. Albee, now located at No. 99 Fifth avenue. Here is clearly manifest to the connoisseur a natural gift conjoined with a scientific knowledge of chemical adaptation in the production of the desired light and shade, especially in his success in securing correct lines, and the skill and taste necessary to produce the strongest and most subtle life-like effect. With these qualities in his favor, the natural result must be a gradual increasing public patronage and popularity. Mr. Albee was formerly located at 784 Fifth avenue, but was induced to remove to his present rooms, No. 99 Fifth avenue, which offered better facilities for extensive operations. He is prepared to execute all kinds of Photographic work, but makes a specialty of Architectural and Mechanical Photography, also of Painting in Oil or Water Colors, Crayon Work and to taking enlarged views of landscapes. He has executed contract work from various parts of the different States, and cannot fail to secure mechanical implements and architectural work wherever specimens of his operations are shown. He also takes views of public buildings, residences, bridges, tunnels, etc., and can produce testimonials of some of the most celebrated civil engineers in this country. Mr. S. V. Albee is a native of Thomaston, Maine, where he was born in 1838, and came to this city in 1867. He is a gentleman of excellent social qualities and high artistic attainments, whose work will bear comparison with the best artists in the nation.

JNO. BERGER, Jr.—*Cigar Manufacturer, 2525 Carson St., South Side.*

On the day of the inauguration of the International Exhibition in Philadelphia, May 10, 1876, Mr. Jno. Berger, Jr., Tobaccoist and Cigar Manufacturer, of the South Side, commenced business for himself in the two-story frame structure, 17x34, at No. 2525 Carson street. Since then his capital has considerably increased. He manufactures a variety of popular brands of Cigars, making a specialty of Mould Tobies, which have acquired a wide reputation for superior excellence. He also carries a full stock of Choice Cigars, Manufactured Tobacco and Smokers' Articles, and is doing a flourishing business, which is gradually increasing. Mr. Berger is a native of Prussia, and was born in the Rhine province, celebrated in song and story. He has been a resident of Pittsburgh since 1855, and is well and favorably known through the medium of the excellent cigars bearing his trade mark and guarantee.

JAMES CALLERY & CO.—*Leather, Hides, Pelts, etc., 102 Liberty St.*

Few establishments are better known in this or foreign countries than that of the above firm, whose warehouse is located at No. 102 Liberty street. This house was founded in 1792 by Judge Hays, father of the well-known gentlemen, William, Richard and Charles Hays, of Pittsburgh. The business was conducted successfully by the Judge for many years, when he was succeeded by two of his sons, Richard and Charles Hays, and they in turn by the firm of Hays & Stewart. The business remained in the Hays family until 1870, when the present proprietors assumed its control. The office and warehouses occupy a substantial three-story brick edifice 20x110 feet in size, and is stocked with Hides and Leather, Oils, Tallow, Wool, Shoe Findings, etc. The specialty of the house, however, is Harness and Belting Leather, of their own manufacture, a product which has gained for them the prize medals of the Pittsburgh Exposition Society, a prize medal at the Philadelphia Centennial Exhibition of 1876, and a bronze medal at the Paris Exposition of 1878. Their tanneries are located in Allegheny City, and cover one and a-half acres of ground, and have a capacity of 16,536 tanned hides per annum. The stock carried by the firm amounts in value to not less than \$100,000. Their trade extends all over the United States and Europe, their annual sales reaching \$250,000. Mr. Callery has been operating this establishment since 1870, but had been previously engaged in the same line of business in Allegheny for twelve years.

W. F. CASEY,—*Carpenter, Contractor and Builder, 5 and 7 Chatham St.*

This business was originally started by Mr. Casey in 1864 with limited capital, being quite a young man, but with individual pluck and courage he built up a very flourishing business. In 1867 he was burned out and met with very heavy loss, but he soon rebuilt and reestablished himself more firmly than before, so that his present annual business in Carpenter Work amounts to about \$18,000 per annum, and building contracts would augment this sum to about \$30,000. He keeps on hand an ample stock of lumber and material and is prepared to take contracts for Carpenter Work or Buildings upon liberal terms. He will execute his work promptly and to the satisfaction of those who employ him. He has put up some of the best buildings in the city and can refer with pride to his work. His workshop is fifty feet square, besides yards for stock 60x30 feet, and employs skilled workmen. Mr. Casey is a practical workman and stands high in the community for reliability and promptness.

F. H. BUSSMAN,—*Groceries and Produce, 501 Carson St.*

Every family and every member of it feels more or less interest in the Grocery and Provision trade which supplies so large a proportion, directly and indirectly, of the articles of food. Therefore, in noticing the prominent and popular business houses of this city, we desire to call attention to the well stocked Store and excellent Grocery and Provision house of F. H. Bussman, No. 501 Carson street, South Side. This old establishment has existed for over twenty years as a supply for articles in this line, though it only came into the hands of Mr. Bussman in 1878. He has an ample capital for the transaction of a flourishing business and is doing a trade of about \$8,000 per annum, which is gradually increasing. He carries a stock of about \$1,500 in his business room, which is in a two-story brick building 24x60 feet in size, and keeps the best and freshest goods in this line, embracing all desirable articles usually found in a first-class grocery and provision store. Mr. Bussman was born in Germany March 26, 1837, and came to this city in 1850, though he did not engage in business for himself until he opened his present place in June of last year though previously in partnership with others. He is a man of excellent business qualifications, and his store retains many of its old and new patrons.

GUST. A. SEXAUER,—*House, Sign and Fresco Painter, 2001 Sarah St.*

Mr. Sexauer started this business in 1869 and has been quite successful, owing to the excellent character of his work. He carries ample stock and is one of the most skilled workmen in this city, doing a fair annual business. His grounds cover an area of 24x120 feet and his shop is 24x26 feet, giving employment to five hands. He does House, Sign and Ornamental Painting, Lettering, Gilding, Fresco Painting, Graining, Glazing, etc., in the most artistic manner. Mr. Sexauer was born in Germany in 1838 and came to this city in 1869. His excellent work cannot fail to give satisfaction to his patrons.

A. FULTON'S SON & CO.—Bell & Brass Founders, 70 Second Av. & 91 First Av.

As the only establishment in this city engaged in the manufacture of Bells as a specialty, and on account of a career, that in three years will have traversed the changes of half a century, the firm of A. Fulton's Son & Co. is particularly entitled to consideration in a review of the industries of Pittsburgh. The business was originated in 1832 by Andrew Fulton, Sr., with a capital so small that his operations were confined to one room, his only employee being himself. With so great a lack of material resources, however, the elder Fulton had a backing in resolution, energy and ingenuity, to an extent possessed by few men, and upon which no drafts ever went to protest. For years he struggled on with varied success, his business enlarging, and as steamboat building increased, the bells of his manufacture became in great request, and the brass castings turned out from his shop were the best to be obtained in the country. His successors, S. M. & Wm. M. Fulton, under the above style, now conduct the business in a manner and upon a scale absolutely unheard of, when the founder of the house with crude and inadequate appliances cast the first bell west of the Allegheny mountains. The premises now occupied consist of two large brick buildings three-stories high, and respectively 35x80 and 70x80 feet with frontages on First and Second avenues. Here the mechanical equipments in every respect are as complete as capital can provide or ingenuity devise. Twenty-five expert mechanics are employed at a weekly outlay of \$300 or more, and a 25-horse power engine is kept in constant operation. The ancient reputation of the house for manufacturing the best products is sedulously maintained, and the bells that are cast at this foundry vibrate over the entire United States, and peal across the remotest waters of the globe. The members of the firm besides inheriting the business have derived from its founder much of the constructive genius for which he was celebrated; Mr. S. M. & W. M. Fulton having obtained patents on several clever devices, among which the patent steam water heater and rotary bell fixture, are perhaps the most useful. The identification of this house with the productive industries of the community for so long a period, and the honorable policy upon which its business has uniformly been conducted, make it to a certain extent a representative institution.

JOSEPH EHRSTEIN,—Druggist, Cor. Penn Av. & 28th St.

One of the neatest and most attractive drug stores on Penn avenue is that of the courteous gentleman, Mr. Joseph Ehrstein, at the corner of Penn avenue and 28th street. He occupies a large and handsome room which is handsomely fitted up, and presents an attractive and elegant appearance. He carries a large and varied stock of drugs, chemicals and medicines, surgical instruments and appliances of the finest quality, toilet and fancy articles, perfumery, and such goods as are to be found in well regulated establishments of the kind in great variety, all of which are handsomely displayed in numerous show cases, counters and shelvings. This store was founded in 1866 by J. F. Caldwell, who built up quite a fair trade; it passed from him into the hands of Becker Bros., who conducted it for a time, selling it out in 1876 to its present popular proprietor, who has carried it on with energy and to the satisfaction of its large number of patrons ever since. The store is well located in the midst of a prosperous district, and is doing a fine business that is increasing from time to time. Mr. Joseph Ehrstein, its present proprietor, is a young gentleman of ability and energy, possessing every requisite of success in the business in which he is engaged. He was born in Birmingham or South Side, part of the city, in 1841, early in life he learned the drug business, to which he has studiously and continuously devoted his life. He is a thoroughly skilled, scientific and practical druggist and pharmacist, enjoying a high reputation in this respect. He gives personal attention to his large and growing prescription business, in which branch of his profession he stands unrivalled. He possesses the confidence and esteem of the medical fraternity in an eminent degree. He is an active member of the State Pharmaceutical Association, and an upright and public-spirited gentleman.

THE HUMBOLDT FIRE INS. CO.—No. 1 Pennsylvania Av., Allegheny.

The Humboldt Fire Insurance Company of Allegheny should be noticed among the best business concerns of this city. This Company commenced business in 1871 on a capital of \$25,000, transacting a general fire insurance business, confined chiefly to Allegheny county. The importance of the business transacted by our local underwriters is frequently lost sight of, but when we take into consideration the vast amounts of insurance that must necessarily be carried in a business community like this, the importance of these transactions becomes apparent. That the Humboldt Insurance Company has met with success is evinced by the fact that their capital in this short time intervening since 1871, has increased to \$75,000, and the Company now carry \$1,300,000 insurance. Their office is located at No. 1 Pennsylvania avenue, Allegheny, in the Enterprise Bank building, one of the finest business structures in that beautiful city. The President is L. Wiederhold, Esq., with Mr. Thomas J. Graff, as Vice President; Jno. Seiling, Treasurer; and Jos. P. Fisher, Secretary. The board of Directors as at present organized are:—L. Wiederhold, F. G. Weise, Jno. Berger, A. Heyl, Thos. J. Graff, Frederick Gwinner, A. F. Schwerdt, P. J. Urling, Jno. A. Eckert, John Seiling, G. Langenheilm, R. F. Bauman. These gentlemen are well and favorably known in commercial and financial circles in the Iron city as gentlemen of high, social and business standing, and their financial responsibility is of such a nature as to warrant unbounded confidence in this Company. The Humboldt has enjoyed its full share of patronage, and its judicious and conservative policy must remain among the most solid and substantial institutions in this line in the country. The business of local underwriting, which invariably increases as cities grow in wealth and importance, capital accumulates, and the necessity no longer exists to pay foreign capitalists for risks on their property, and no Company at present engaged in the business has done more to promote the local insurance interests of the two cities than the Humboldt Fire Insurance Company, certainly none are better entitled to the patronage of the citizens of Allegheny county.

SCHIMMEL'S FRUIT BUTTER,—W. M. Gray, Agt., Cor. 4th & Liberty Sts.

While the industry relating to the manufacture of Fruit Butter is by no means a common one, yet the extent to which this useful business has developed within the past few years entitles it to comment in this work. The peach, pear, quince and apple butter prepared for this market and for which Mr. W. M. Gray has the sole agency, are readily sold to the amount of \$20,000 annually, engaging the labor of two men and two horses and wagons, besides the active co-operation of Mr. Gray, the trade lying mainly in Pittsburgh, Allegheny and the surroundings. For ten years the business has been established in this city, growing in dimensions annually, for half that time the present business premises have been occupied. Mr. Gray is a native of this State, having been born in Pennsylvania in 1847, removing to this city in 1865, from which time he began his business career.

C. F. KUHLMAN,—Wholesale and Retail Grocer, 49 Federal St., Allegheny.

The establishment of Mr. Kuhlman is situated on the west side of Federal street, a short distance below the R. R. depots, and immediately on the line of the Pittsburgh & Allegheny and The Troy Hill Passenger Railways. Mr. Kuhlman was born in Germany in 1839, and came to this country and settled in Pittsburgh in 1854. He obtained a position as clerk with Wm. Haslage, and by industry, perseverance and close attention to business was admitted into partnership in 1862. The partnership was dissolved in 1874 by the withdrawal of Mr. Kuhlman, who shortly after engaged in business, on his own account, at his present location, where he keeps a full stock of everything in the line for home and table, at lowest prices, and is doing a large annual business, which at present amounts to \$30,000. Wm. Vauder, Louis Shuster and Chas. Sleeper, his able assistants, are polite and agreeable gentlemen.

Pittsb'gh, Phoenix, Sligo, Empire & Mastodon Glass Factories,*Wm. McCully & Co., Proprietors; Office, 18 and 20 Wood St.*

Established nearly half a century ago, there is associated with the business interests of Pittsburgh no establishment in this line which has attained greater magnitude or more creditable celebrity than that of Messrs. Wm. McCully & Co., whose principal office is located at 18 and 20 Wood street, in this city. The enduring and world-wide reputation which the city of Pittsburgh enjoys as the central mart for glass in all its various forms, is a matter of just pride, not only to all who are associated with the industries of this city, but to the citizens of the whole country as well. In no small degree have the house of Messrs. Wm. McCully & Co. contributed to establish and maintain this reputation at home and abroad. The business was originally started, in 1830, by Mr. Wm. McCully, and although since its inception the country has passed through severe and trying times, affecting all general transactions, and some of which have been especially severe upon the glass trade, this house has maintained its business reputation to such a degree as to entitle it to the unbounded confidence and high esteem it holds before the commercial world. Conducting its operations upon a conservative and solid basis, it has grown in the magnitude of its facilities and transactions from a comparatively small beginning, until it now employs and operates six different establishments, in each of which are employed a large number of workmen. Two situated on Carson street, South Side, one on Liberty street, one on 22nd street and two on 28th street, being the Pittsburgh, Phoenix, Sligo, Empire and Mastodon Glass factories. The extent of the operations are without doubt unsurpassed by any similar house in this country or Europe, while the products find a market all over the civilized world. Associated with Mr. McCully are Mr. Mark W. Watson and Mr. John McM. King, each of whom are thoroughly conversant with the glass trade of the country, and gentlemen whose financial and executive ability have largely contributed to the prosperity attending the enterprise in which they are engaged. The general business embraces the manufacture of Window Glass, white, green and black Glassware, Demijohns, Fruit jars, etc. It would be impossible in a work of this nature, to give to the distant reader a clear idea of the perfection of all the appliances associated with their various works, which are, however, the most advanced and thorough which ingenuity or energy can devise, and we have no hesitation in saying that those interested in the glassware trade can form no more advantageous commercial relations than those which may be established with the house of Wm. McCully & Co., Nos. 18 & 20 Wood street.

JOHN P. VIERHELLER, —Dry Goods, etc., 119 Chestnut Street, South Side.

Mr. John P. Vierheller occupies an excellent location at 119 Chestnut Street, in the 36th ward, where he keeps a full stock of fresh and desirable Goods suited to the market, and embraces Staple and Fancy Dry Goods, including Ladies' Dress Goods, Domestic Goods, Hosiery and Gloves, Trimmings and Furnishing Goods, Notions, &c.; also Boots and Shoes, for men, women, boys, misses or children, Carpets and Oilcloths, Hats, Caps and Millinery Goods. This latter department is under the supervision of the most experienced ladies. Mr. Vierheller is an experienced and excellent buyer, and uses the most discriminating taste and excellent judgment in the selection of goods for the different departments of his trade. The business was originally started by him in 1869, and now amounts to from \$12,000 to \$20,000 per annum.—He was born in Germany in 1832, and came to this city in 1849.

ATWOOD PAXSON, —Custom Fine Shirts, 228 Liberty St.

Mr. Paxson has been in the Shirt business for a number of years, in which time he has represented the makers of the finest work turned out in Eastern cities. Having built up a large trade in Pittsburgh, and finding it increasing with each successive visit, he determined to locate himself permanently in the city. In March, 1879, he opened a handsome office and salesroom at No. 228 Liberty St., next to the Penn Bank, where, in addition to a full line of samples of Dress and Fancy Shirts, he keeps a stock of the latest shapes and styles in Collars and Cuffs. A specialty in this line is a grade of full Linen Collars and Cuffs—band, neck-band and living being all linen; thus assuring even shrinkage in washing, and admitting of the goods being done up at home as well as at the best steam laundry. The gentlemen of Pittsburgh and surrounding towns are now afforded the advantages of procuring work of a really high and excellent character, and the rapid increase in orders attests how much the goods of the house are appreciated by those who desire a perfect-fitting, elegant and durable article in this line.

CHAS. LOUDER, —Manufacturer of LAUNDRY BLUE, 85 Beaver Av., Allegheny.

There may be more extensive enterprises, but none more worthy of notice in this work than that of Mr. Chas. Louder, manufacturer of *Laundry Blue*, also Flavoring Extracts, Oils, Perfumeries, Luks, Essences, etc., 85 Beaver Avenue, Allegheny City. The laboratory and business department is situated at No. 85 Beaver Avenue, and the transactions which were commenced in 1876 have gradually increased from year to year. The excellent qualities of the articles manufactured by Mr. Louder show a thorough knowledge of chemical analysis, which must result in increased and enlarged operations, as these articles are in constant demand.—Mr. Chas. Louder was born in New York city in 1850, and came to this city in 1870. He is a gentleman of progressive tendencies and enterprising spirit.

WM. BURN, —Union Barrel and Cask Factory, No. 1709 Fox Alley, South Side.

This business was started here by Mr. Burn in the spring of 1878. He has a good supply of material and every arrangement made to receive all the stock required in his business, and to fill all orders promptly. Mr. Burn is yet quite a young man, and is destined to succeed, with his enterprise and business capacity. He was born in London, England, in 1856, and in his infancy, with his parents, came to this country, and since 1870 he has resided in this city. His specialty in trade is the manufacturing of Glass-House Packing Barrels, besides being prepared to make all kinds of Casks that may be required. He gives close attention to his business and selects all his stock with the greatest care, and his prices will be satisfactory and acceptable to all.

H. C. SKELLEY, —News Dealer, Stationery and Tobacco, 89 Fifth St., McKeesport.

Mr. Skelley started in business in 1878. He now carries a full line of School Books, Magazines, Periodicals, Papers, Stationery, Tobaccos, Cigars, Notions, Confectioneries, etc., and is doing a very liberal trade. Mr. H. C. Skelley was born in Latrobe, Pa., in 1859, and came to McKeesport in 1872.

ANTON LANG, —Glassware, Lamps, Oils, etc., 139 Market St., McKeesport.

Mr. Lang is establishing a permanent and flourishing trade here in Elaine Oil, Lamps, Lanterns, Reflectors, Fruit Jars, and General Glassware, at 139 Market street. The Elaine Oil is safe and economical. He was born in York, Pa., in 1841, and came to McKeesport in 1876. Commenced this business last Spring. He is a pleasant gentleman and worthy of liberal patronage.

THE NEW YORK GRAPHIC, —Goodsell Bros., Publishers & Proprietors.

Among the various newspapers of the United States none hold to-day a higher rank or more enviable position than the **NEW YORK GRAPHIC**, the only illustrated daily journal in the world. This paper, which notwithstanding the opposition of the leading dailies of New York has obtained an immense circulation is now established on a firm basis and is one of the ablest periodicals in the country. The Goodsell Brothers are natives of Pontiac, Michigan, and at an early age began to exhibit unmistakable traits of "yankee" enterprise. They at first decided to adopt the advice of Horace Greeley and "go West," and for a time they occupied positions on the local press of Chicago. Their aspirations were, however, upward and onward, and they shortly afterwards established the *Spectator*, a journal devoted to the interests of insurance companies, and which has ever been acknowledged as a standard publication by the members of that fraternity. Although eminently successful in this enterprise the brothers had still higher aspirations, and after mature deliberation they decided to remove to New York and establish a daily illustrated newspaper, giving all the latest telegraphic and local news with correct illustrations of current events in an attractive form, and terse and practical editorial notes. The result of their venture has more than equalled their expectations, and the **NEW YORK GRAPHIC** has to-day a circulation of which the older journals might well feel proud. In connection with their illustrated paper they have the most varied and extensive printing establishment in the country, where all the different styles and designs of photo-lithography and illustrated printing are executed in the highest style of the art.

PITTSBURGH, FT. WAYNE & CHICAGO RAILROAD.

This old, reliable and thoroughly first-class line, now under the management of the Pennsylvania Company, is the only direct route from Pittsburgh to the West. In connection with the great Pennsylvania Railroad, (with which it is operated as one continuous line), it is the only line running three trains with through cars between Chicago, New York, Baltimore and Washington City via Pittsburgh. Passengers from Pittsburgh to any portion of the great West will find this the most direct as well as the most economical route, as all railway lines centering in Chicago connect with the through trains of the Pittsburgh, Fort Wayne and Chicago Railroad, and all passengers holding through tickets by this line are transferred from other roads to the Chicago depot, corner of Madison and Canal streets free. The effort of the managers to make this road the best on the continent are fully appreciated by the traveling public. Its rolling stock is always of the best, its locomotives the most powerful and rapid, its passenger coaches of the most elegant, luxurious and comfortable description, and on all through trains Pullman Palace, Drawing Room and Hotel cars of the finest and most perfect construction furnish unrivalled facilities for travelers. The schedules on this line are so arranged that each train is independent and runs through on its own time, regardless of all other connections. The bridges on this line are all constructed of iron and stone, and no expense has been spared to render them perfectly safe. Its double track is laid with steel rails, and the greater portion of the line is ballasted with broken stone, forming a firm and solid road bed and avoiding the dust so annoying to passengers on other roads. All locomotives and passenger cars are provided with the Westinghouse patent air brake and all the latest and most approved conveniences and improvements of the age. To the business men of Pittsburgh desirous of escaping from the smoke, dust and heat of the city to their suburban residences, the Fort Wayne road offers the greatest inducements, as accommodation trains arrive and depart from the Allegheny depot almost every hour, stopping at all the stations which are located less than half a mile apart along the bank of "La Belle Riviere" from Allegheny to the sylvan shades of Enon valley. No more desirable locations for rural residences can be found in the suburbs of any American city than on the picturesque hills bordering the Ohio river, with their many advantages of location, pure air, delightful scenery and picturesque surroundings, and it is not surprising that so many professional and business men of Pittsburgh avail themselves of the opportunities offered by the Fort Wayne road to breathe the pure fresh air of the country after a day of toil amid the din, confusion and smoke of the city. Mr. J. D. Layng is the general manager of this road, with headquarters at Pittsburgh, and Mr. F. R. Myers, the general passenger and ticket agent, who has had an experience of more than twenty-five years in this position, most acceptably fills that office, with headquarters at No. 65, South Clark street, Chicago.

THE ALLEGHENY VALLEY RAILROAD.

This is the only direct route between Pittsburgh and Buffalo and Niagara Falls, and is one of great beauty and interest, passing, as it does, through many of the most picturesque regions of America, following the lovely valley of the Allegheny River, passing through the oil regions of Pennsylvania, and the romantic scenery in the region of Lake Chautauqua, a most delightful spot, and the highest navigable water in the United States, being 1,454 feet above the level of the sea, with a pure, dry, and invigorating atmosphere, making it one of the most delightful resorts on the continent. Lake Chautauqua is a beautiful sheet of water, clear, pure and calm. It is four miles in length, and varies in width from two to five miles. Picturesque scenery, well cultivated farms and magnificent groves surround it. Good hotels, handsome residences and attractive cottages may here be found, and steamers and sail boats ply upon the lake for the convenience of guests and tourists. At this point are also the grounds of the great National Sunday School Assembly, whose annual conventions attract visitors from all portions of the Union. The Allegheny Valley Railroad, with its various connections, is rapidly becoming the most popular route from Pittsburgh to all points North. The line possesses one of the smoothest road beds in the country, laid with steel rails and ballasted with broken stone, rendering it free from dust. First-class coaches are run on all trains, equipped with the Westinghouse patent air brake and the improved Miller platform. Pullman Drawing Room Sleeping Cars accompany all night express trains between Pittsburgh and Buffalo, and all the accommodations and arrangements are first-class in every particular. Baggage will be checked and tickets sold by this route to all important points at the Union Depot, at No. 78 Fifth avenue, and at the general office of the company in Pittsburgh. Mr. David McCargo is the general superintendent of the company, and Mr. J. Morton Hall the active, energetic and affable General Passenger and Ticket Agent. Passengers to Buffalo, Niagara Falls and all points in Northwestern New York and Canada will find the Allegheny Valley Railroad the most comfortable, pleasant and direct route.

THE IMPROVED **HOWE** STANDARD SCALES

The only Scale having Protected Bearings. Scales for every use. Trucks, Spring Balances, Alarm Cash Drawers, Groceries' Fixtures, etc. Particular attention paid to Repairing Scales of all kinds and make.

PRIEST, PAGE & CO., General Agents,
Branch Warerooms, 63 Wood St., Pittsburgh.

DEXTER SPRING CO.—*Manfr's. of the Celebrated Dexter Carriage Springs,*

Hulton Station, Pa.

The celebrated Dexter Buggy and Carriage Springs, manufactured by the above named Company, have already acquired a world-wide reputation for superiority over any other spring in the market, and the production of the various patterns now in use forms no inconsiderable item of the manufacturing and industrial interests of Pennsylvania. The Dexter Spring Company was incorporated under the laws of this State in 1875, with a capital stock of \$24,000, which has since been considerably increased. The works are located at Edgewater Station, on the line of the Allegheny Valley Railroad, in the borough of Verona, Hulton post-office, eleven miles above Pittsburgh, and occupy an area of about one acre. The main building is 40x150 feet, and is supplied with the most perfect and complete machinery, the motive power for which is furnished by one twenty-horse power engine and boiler. The Company also owns a number of comfortable dwelling houses which are rented to employees and others. The business is carried on in six different departments, each being under the immediate management of skilled and competent superintendents, and which may be classified as follows:—The wood working department, machine and engine department, blacksmithing department, grinding department, fitting department, and the finishing department. Employment is regularly furnished to about thirty hands and sometimes a much larger force is required. These works are the most complete and extensive of the kind in the United States, making only the special Dexter Springs. From \$10,000 to \$15,000 worth of finished stock is usually carried on hand, and the annual business of the Company exceeds \$60,000. Their trade extends all over the United States, with a steadily increasing demand from Australia and other foreign markets. Mr. J. C. Yarnell, the genial and accomplished bookkeeper, presides over the office department and clerical force, and Mr. H. Barr, a skilled and competent artificer, exercises a general superintendence over the mechanical departments. The springs manufactured at this establishment, which are known as the "Dexter," the "Dexter King," the "Dexter Queen" and "Fairy Queen," are universally acknowledged to be of faultless mechanical construction and are made from a superior quality of crucible steel, thus ensuring elegance, lightness and durability. The crowning feature of their excellence is their special adaptability to carriages and road wagons for use on paved streets or uneven surfaces, combining as they do, strength, elasticity and durability. The spring motion is such that in riding over the roughest roads, rocks, boulders, stumps or logs, the jar is less perceptible to the occupant of the vehicle than with any other form of spring and less danger of breaking is experienced. The ordinary two passenger vehicle springs have been tested by placing 2,050 lbs. weight on them over night, when the pressure was removed they resumed their original shape. These springs are warranted under all circumstances. They were exhibited to admiring thousands during the Centennial Exposition, in Philadelphia, in 1876, and at the various expositions of the Pittsburgh society, and have been gaining in favor ever since. They are in use by many of the leading carriage manufacturers in all portions of the United States, and give the most perfect satisfaction. Every carriage builder in the country should order a trial set of each style of springs, especially the Dexter Queen, which carries the palm in our estimation over every known form of springs, and be convinced by actual use that they are superior to any now before the public. Mr. W. W. Grier should be given the credit of developing the Dexter class of springs, as he is the inventor and proprietor of many of the valuable points in their construction. He is the patentee of many springs and the founder of the Company. He now holds the position of secretary and treasurer and is also general business manager. He is a practical mechanic, and it is owing largely to his efforts, especially at the Centennial, that the Dexter class of springs came to their present favorable position before the public. In addition to the springs which we have mentioned, he has patented a number of ingenious and important improvements, among which we may mention a new device to be used as a fifth wheel, which will in many cases supersede others now in use. This business which has now assumed such a magnitude, was started originally by Mr. Grier in a small rude way, he doing his own work and carrying on his experiments in his own barn. He subsequently removed to a small frame building, but so rapidly did the reputation of his springs increase when their merits and advantages became known, that he was compelled to seek more commodious quarters and the present spacious building was erected and fitted up with the most ingenious and perfect machinery especially adapted for the uses to which it is applied. Mr. Grier is an enterprising and energetic gentleman and public-spirited to a fault, highly respected and esteemed, and a strong and unwavering advocate of temperance and morality. By his own efforts and exertions he has achieved a proud and prominent position in the business community and as one of the leading manufacturers of Western Pennsylvania.

J. H. ORTMAN & CO.—*Wholesale Grocers & Dealers in Flour, 112 Second Av.*

Transacting a very heavy trade in the line of Groceries, and especially in Flour, of which the "Young America" brand is the leading, the firm of J. H. Ortman & Co. should not escape mention in this work. Established in 1876 by the same parties and under the same style, the house began business with an ample capital, thorough knowledge of the trade, and plenty of enterprise and discrimination. With these advantages the business of the house was bound to increase rapidly, as proved by its present status and traffic. The firm is individually composed of J. H. and Theodor Ortman, F. W. Spreen and Joseph Ortman, the last three forming the "Co." The firm is a favorite one, and in all lines of general Groceries and in the special brands of "Royal Paris," "Gilt Edge" and "J. H. O. & Co. Patent St. Louis Fancy," "Big Blue A" and "Young America" Flours can offer inducements and advantages to the trade that can be rarely duplicated, never excelled. In every respect this house is cordially commended as being fair, liberal and enterprising, with facilities for the successful operation of their trade that prove of the highest benefit to their customers.

THOS. McMICHAEL,—*Grain, Flour and Produce, 222 and 224 Fifth Av.*

Mr. McMichael commenced business at his present location in 1866, and has now an available capital of \$10,000. He transacts a wholesale and retail business in Grain, Feed, Hay, Flour and Produce, carrying an average stock of about \$1,000. He occupies two buildings, each 20x60, at the numbers named, and his business is conducted in two separate departments, requiring the services of four assistants, with a weekly pay-roll aggregating \$42. Mr. John McCarty is book-keeper and presides over the office business and general in-door management of the business. Mr. McMichael has a large and lucrative trade, extending throughout the city and its suburbs and his establishment will compare favorably with any in the city engaged in the same line of business. He was born in Ireland January 1, 1828, and has resided in this city ever since he came to this country.

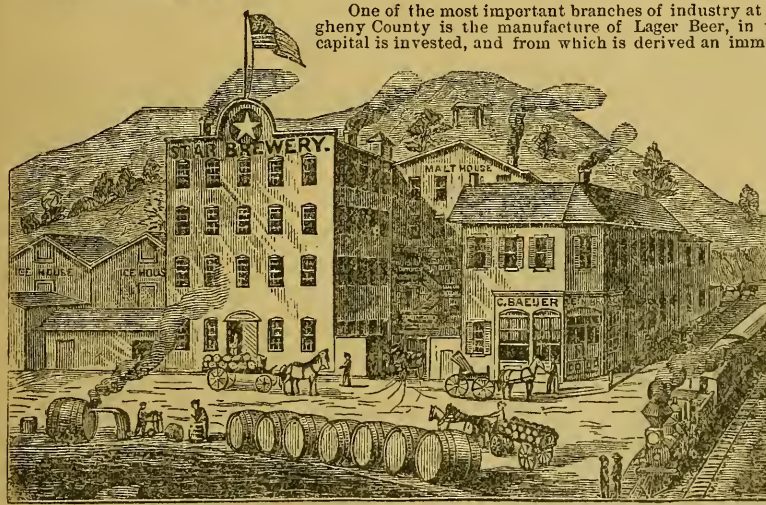
HENRY J. SMITH,—*Dry Goods and Notions, Washington Av., 31st Ward, S. S.*

This business was originally started by Mr. Henry J. Smith in 1873 and has met with a very encouraging patronage from the neighborhood. It embraces a full line of everything in the way of dry goods suited to the locality, also Notions, Fancy Goods, etc. Mrs. Smith, with an attentive assistant, is always on hand to attend customers. The building occupied is a two-story brick, 21x36 feet in size, and is conveniently located. Mr. Smith was born in this city in 1817 and has resided here ever since. Mr. Smith is a glass mould maker, having special charge of that department in the works of Bryce, Walker & Co., South Side. He served as a volunteer in the late war, had the honor of being the last captain of the Walton Hose Company in the Volunteer Fire Department of East Birmingham before its incorporation into the city.

H. C. FRICK & CO.—*Man'rs. of Connellsville Coke, 104 Fifth Av.*

The Connellsville Coke region produces the largest quantity of coke of any in the United States. According to the latest information there are in this region 3,668 coke ovens, and of these over 1,000 are either owned or controlled by H. C. Frick & Co. This fact, in itself, may give some idea, however inadequate, of the magnitude of the business of the firm, and when it is further stated, that their coal lands lying in Westmoreland and Fayette counties amount to 2,500 acres, it will be readily seen that they are the largest coke producers in this country, and probably in the world. The great proportions which the business of Messrs. Frick & Co. has assumed, may, perhaps, be attributed in a large degree to the peculiar advantages which the Connellsville region offers for the business of coking, and also, in part, to the fact that the firm convert all the coal mined by them into coke, thus making the latter an exclusive specialty. The coal bed or stratum of what is known as the Connellsville region, is about fifty miles distant from Pittsburgh, and lies mainly in the counties of Fayette and Westmoreland. The tract is of a triangular shape, being generally about three miles wide and fifty miles long. The vein is a peculiarly good one, the beds producing from eight to nine feet of workable coal. Regarding the coal itself, it is described as being bituminous, with generally a dull, resinous lustre, alternating with seams of bright, shining crystalline coal, coated with a yellowish silt and containing numerous particles of slate and some crystals of pyrites. From this material the celebrated Connellsville coke, which is shipped to all parts of the country, and which is known wherever there is a smelting furnace is made. In his report on coke, Mr. Platt describes that produced by Messrs. Frick & Co. as the typical coke, declaring it to be "as thoroughly burned and as well made as can be produced in the Connellsville basin." A sample of the coke made by this firm and analyzed by Mr. McCreath, gave the following result.—Water at 225 degrees, 030; volatile matter, 460; fixed carbon, 89,576; sulphur, 821; ash, 9,113; total, 100,000. The coke made by the firm is of a silvery lustre cellular, with a metallic ring, tenacious, as free from impurities as it is possible to be got, and capable of bearing a heavy weight in the furnace. It is particularly in demand as a blast furnace fuel, and also to be mixed with anthracite and bituminous coal in the production of open iron, such as used in the Bessemer process. The resistance to compression displayed in the coke produced by this firm, together with its porosity, have rendered it indispensable in this class of work. Another department of iron working, in which Messrs. Frick & Co.'s coke has earned a high reputation, is that of stove moulding. Their coke, as a fuel, melts much faster and works hotter, thus effecting a large saving in had castings and waste in the furnace. The estimation in which it is held by smelters of the precious metals, is seen in the fact that in some cases the freight is as high as \$25 per ton to points in the far west, to which the firm ship. In fact their coke may be said to have attained a universal use in the working of metals, and in blast furnaces for iron smelting: it is used all over the country from Lake Champlain in the East to Salt Lake City in the West. Messrs. Frick & Co. produce about 600,000 tons of coke per year, employing in their mines and elsewhere 1,200 men, with a monthly pay-roll of about \$50,000. For their river transportation, (which is comparatively small, the greater part of their shipments being by rail), they use six of their own barges, and for the purpose of transferring coke from the railroad cars to the barges employ a large tippie. The business of the firm extends throughout the Union, wherever metal is worked.

STAR BREWERY,—*C. Bæuerlein, Bro. & Co., Bennett's Station, Shaler Township.*



One of the most important branches of industry at the present day in Allegheny County is the manufacture of Lager Beer, in which a large amount of capital is invested, and from which is derived an immense revenue. Owing to the largely increased demand for this now staple production within the past few years, most of the firms formerly engaged in the manufacture of ale exclusively, have been compelled to yield to the inevitable, and abandon their former business to engage in the manufacture of Lager Beer, and those firms who for years have been brewing Lager have found their trade so much increased as to demand enlarged facilities, and more commodious quarters in which to conduct their business. To the old established houses, who for years have furnished an admirable article of Beer, too much credit cannot be awarded for their efforts in developing the taste for this delicious and health giving beverage. Probably one of the oldest and most successful beer breweries in this section is that of Messrs. C. Bæuerlein, Bro. & Co., located at Bennett's Station, on the West Pa. R. R., about two miles from the Allegheny Station, and known as the Star Brewery, which is one of the most perfect and complete in all its appointments of any similar establishment in the West. The business was founded in 1845, by Mr. Adam Bæuerlein, in the 5th ward, Pittsburgh, and subsequently removed to its present location, where better facilities were obtained, and the business considerably increased. The present members of the firm are Mr. C. Bæuerlein, Mr. Adam A. Bæuerlein and Mr. Fred Klusman. The buildings occupied by the firm are large and admirably arranged, consisting of one large four-story frame building, with a three-story stone structure in the rear, a malt house five stories in height, with a capacity of 25,000 bushels, two ice houses, having a capacity of more than 1,200 tons, and two additional ones, situated a short distance from the main buildings, with a capacity of 3,000 tons. The brewery and malt house are supplied with all the latest improved machinery and appliances, steam power, &c., while their vaults and ice houses are admirably arranged. They carry an average stock of about \$25,000, and their annual sales will reach fully \$60,000, the principal demand for their products being in Allegheny and Butler counties. The beer manufactured by this firm is unrivalled for purity, flavor and general excellence, and has attained a wide spread popularity throughout this section, and as an evidence of the appreciation of its fine quality by the public, it is only necessary to cite the fact that each year brings them greatly increased trade. Messrs. C. A. and A. A. Bæuerlein are natives of Pittsburgh, and Mr. Klusman of Germany. They are thorough, practical brewers and maltsters, conversant with all the details of the business, and as they use only the very best materials and employ only skilled and competent workmen, it is not surprising that their success has been fully equal to their expectations. They are wide awake, enterprising and reliable business men, and stand deservedly high in the community in which they reside.

ST. CHARLES LIVERY AND SALE STABLES,—

J. H. Skelton, Proprietor. Nos. 121, 123 and 125 Third Avenue.

The superior management and fine equipage in connection with the Livery and Sale Stables, now conducted by Mr. J. H. Skelton, at Nos. 121, 123 and 125 Third Avenue, is worthy of notice in this work. This establishment is one of the best, as well as one of the oldest of the kind in the city, having been in existence now for over twenty years. It was originally occupied by Mr. W. S. Jackson, and came into the hands of Mr. J. H. Skelton in 1875. With characteristic energy he at once proceeded to improve the facilities, and enlarge the capacity of the St. Charles Livery and Sale Stables to fully meet the popular demand. The building occupied is 90x75 feet in size, two stories high, and is most eligible and conveniently arranged for the business. The newest and best styles of Carriages and Buggies, Phaetons, etc., may always be found, also good travelers, as well as gentle and reliable horses, while this is noted as one of the best feed stables in the city. Carriages supplied for funerals or parties on reasonable terms. Mr. Skelton gives special attention to the undertaking business, with good hearses, which, with or without carriages, will be supplied upon the most reasonable terms, must commend him to the public. Mr. Skelton was born in Chester Co., Pa., in 1838, and came to this city in 1864. He served an apprenticeship and was engaged in the business of carriage manufacturing for a time, which he subsequently abandoned for his present occupation. For so many years associated with the industries of this city, Mr. Skelton has won the entire confidence of the community, not only for his agreeable manners and courteous attention, but equally for his promptness and reliability in all business transactions.

G. W. & B. F. GREENE & CO.—Mfrs. of Ingot Brass, 41st St. & A. V. R. R.

In as much as all products of utility do not so shape their condition by chance, or resolve their atomic character in the varied forms in which we find them, it is but fair to say that a superintending hand, as well as a considerate metaphysical mind should have due recognition in the results produced. And so it is creditable to the firm of G. W. & B. F. Greene & Co. that they have in the person of one of their firm, experience and metallurgic ability of rare attainment, and whose familiarity with the varied physical sciences has enabled him to contribute much of general utility to the world at large, and whose name stands honored in membership with the "American Association for the Advancement of Science." All the metallurgic industries of the world depend upon successful results in the preparations of simple and multiple alloys, as that of changing fibrous iron into steel, or metamorphosing copper by cementation from its fibrous nature to an assumed crystalline form, in which condition it is like that of steel, the better suited to rank among the Metalloids used in the construction of seatings in machinery. The novel, as well as wonderful process of carbonizing copper, renders it a carburete, and when conditioned by the desirable equivalents of metallic tin, is properly a bronze, and hence the name "Carburetted Bronze." This alloy possessing the varied gradations of density according to certain standards already determined, becomes the best combinations of copper and tin the world has yet been apprised of. Rolling mill journals, railway, high speed and general machine bearings have therefore in the product of this house, and by its own merit, the best seating superlatively now known.

DR. F. LE MOYNE,—Surgeon and Physician, Amberson Av.

Among those engaged in the practice of Medicine and Surgery, none are more worthy of notice than Dr. F. Le Moyne. He is native of Washington, Pa., and son of Dr. F. J. Le Moyne. He graduated with honor at the University of Pennsylvania in 1863. Upon leaving college he received an appointment as Assistant Surgeon in the U. S. Army and shortly rose to the post of Surgeon. At the close of the War he settled in Pittsburgh and began the practice of medicine, when he received the appointment of Assistant Surgeon to the Western Pennsylvania Hospital, and afterwards Consulting Surgeon, a position he still holds. He now enjoys a wide and enviable reputation and large practice, and is especially noted in the department of Surgery.

G. LUDEWIG,—Dealer in Bottled Beer, Foreign & Domestic Wines, &c., 100 Centre Av.

Among the energetic and worthy business houses of this city, we call attention in this work to the house of Mr. G. Ludwig, Wholesale and Retail Dealer in Bottled Beer, Foreign and Domestic Wines and Liquors, No. 100 Centre Avenue. The specialty of Mr. Ludwig is Fine California Wines and Bottled Beer. Orders by mail will receive prompt attention. This business, which was opened in this house by Mr. Ludwig on May 1, 1879, is destined to become a popular and important business under the able management of its present proprietor, who has had ample experience and capital, having been engaged in the business at No. 307 Liberty Street for a number of years before removing up here. Mr. Ludwig occupies in this business a brick building of ample size, embracing store and packing house, and employs one wagon regularly and four hands engaged in the business, enjoying both a city and country trade. His specialty is Bottling the celebrated Queen City Brewery's Beer, of Cincinnati, Foss & Schneider, proprietors, of which concern he is the duly authorized agent. This beer is rapidly gaining in public favor, and is by good judges said to be equal to the best beer in the market. He also makes a specialty of the best California Wines, shipped to him direct from Sonoma, and can supply families with that upon which they can rely, on short notice. Mr. Ludwig was born in Germany in 1833 and came to this city in 1852. His experience, excellent business habits and genial manners insure him many friends and patrons and a gradually increasing trade throughout city and country.

F. REILING & SON,—Iron Railing and Wire Works, cor. Butler and 35th Sts.

The works of Messrs. Reiling & Son are located at the corner of Butler and 35th streets, where they manufacture all kinds of Iron Railing, Fences, Builder's Iron Work, Iron Shutters, etc. They also manufacture very beautiful Iron Crosses and designs for Memorials in Cemeteries, etc. These gentlemen started their industry in 1877 at 34th Street, removing to present location in 1879. This firm holds the proprietorship of a patent invented by C. J. Reiling for Iron Fences, by which they are enabled to make a better, stronger and more handsome fence than by any other method. Mr. Reiling, Sr. was born in Germany and came to the United States in 1850, and has been an iron-worker in this city all his life. His son, C. J., was born in this city and has worked at the same business for eleven years.

WM. MITCHELL & CO.—Importers & Jobbers, Hosiery, Notions, etc., 46 Wood St.

For more than a quarter of a century this house has been engaged, though unostentatiously, in the wholesale trade, doing a good and healthy jobbing trade in Notions and Fancy Goods, Hosiery, Gloves, etc. The firm was organized in 1845 as Casey & Mitchell. Mr. Casey retired in 1870. In 1874 Mr. P. Casey and Mr. W. F. Volmer were taken in partnership under the present firm name. Mr. Mitchell was born in Ireland in 1819—has resided in this city for about forty years. Mr. Casey is also a native of Ireland, while Mr. Volmer was born in this city in 1854. The house offers special advantages to the trade and the business is conducted upon the most conservative and substantial business principles.

McKEEVER BROS.—Barrel and Keg Manuf'rs, Cor. 3rd & Bingham Sts., S. S.

An industry of this nature, especially where conducted with the enterprise and skill associated with that of the firm of McKeever Brothers, is worthy of extended notice in a work of this nature. The business was originally started by these practical workmen in 1874, with moderate capital, but which has been largely increased by the individual industry and excellent management of this firm, until it is now one of the leading firms in this line of business, in this city. They are careful not only to use the very best and serviceable timber, but put up their work in the most substantial manner. They are prepared to fill orders on short notice, as they keep a large stock of material ready for use, and the best facilities and appliances to supply barrels or kegs of any variety, either for packing house, glass house, or general country use of any description. They employ a large force of skilled workmen, and manufacture and deliver to all parts of the city on short notice, and at lowest market rates. One boiler and engine of ample capacity are used in these works, and the latest appliances known for facilitating operations. Mr. Thomas McKeever, one of the firm, is the inventor of the Patent Grooving Machine in use here, and which has no equal in perfection for its purposes. The individual members of the firm are Thomas, George and James McKeever. Their trade extends over the two cities and county, and their reputation for promptness, reliability and fair dealing is acknowledged wherever they are known. Among the number of inventions for which this firm have obtained celebrity, we cannot omit to call attention to their keg machine, by which they are able to turn out 1000 kegs per day, with very little cost for running the machine. They have in operation a new barrel machine for chaupering, grooving and leveling barrels, which was patented May 20th, 1879. It has proved itself perfect for this work. It has a capacity of turning out 500 barrels per day. Both of these machines are of the greatest benefit to those engaged in this business, and cannot fail to tribly pay for themselves in their utility and practicability as labor-saving machines.

JOSEPH BLACKLEY,—Successor to Blackley Bros., Coal and Slack Coke, No. 120 Twenty-First St.

This business was first started by Blackley Bros. as early as 1858, and continued by them until April, 1877, when the firm changed and the present proprietor, Mr. Joseph Blackley, became owner. Since that time he carries on the business. He always keeps a sufficient stock to meet all demands, with ample capital and facilities to fill all orders. He has a large number of ovens in use, and is prepared to fill all orders of coke with the greatest of promptness. He does a very fair business, having a large number of regular customers whom he supplies. He employs such a number of hands as the demands of his business require, and will be found a prompt and agreeable business man.

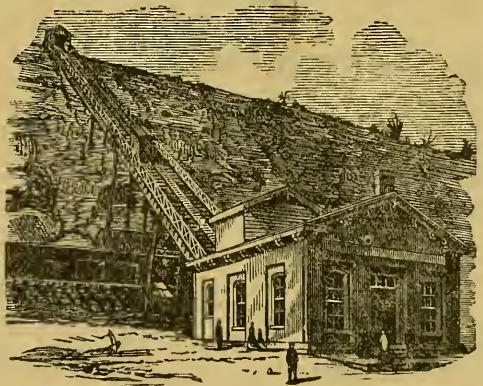
NATIONAL GARDEN AND PUBLIC RESORT,—

Mount Oliver, at the head of Incline Plain, S. S.

We would like to give a fuller notice than our space will justify of this pleasant, popular resort. The National Gardens are situated at the head of Mt. Oliver Incline Plane, and is one of the most desirable places of popular resort associated with the two cities. It is owned and conducted by that popular, genial and enterprising gentleman, John Nasser, Esq. The place was first prepared for this purpose in 1877, and is now most efficiently conducted and provided with everything which can make it inviting and attractive to guests. Besides this the visitor can here have the best view of the city and surrounding country to be had in the neighborhood, a view which extends from 18 to 30 miles over the most beautiful landscape in the world, the two cities, the three rivers in all their beauty and grandeur as they traverse the beautiful valleys. Regular hotel accommodations can be had at most reasonable rates, besides all other refreshments of the season to order. No stranger should visit the city without taking a view from Mt. Oliver Garden and enjoying the luxuries there.

MONONGAHELA INCLINE-PLANE COMPANY.

It is a picturesque and beautiful sight to stand upon the northern bank of the Monongahela, looking southward at the almost mountainous bank, towering like a protecting bulwark to the height of several hundred feet, and then to witness its scientific mastery by human science and engineering skill. Ascending and descending its rugged and almost perpendicular front, the smooth track of the various Incline-Railway tracks convey cars ascending and descending like mammoth balloons traversing the air. Perhaps the most noteworthy and conspicuous of these is the Monongahela Incline Plane, which affords access to Mount Washington, and is operated about 250 feet below the Monongahela bridge. In July, 1863, a plan, submitted by Mr. John J. Eudress, a civil and mining engineer of celebrity, was adopted, and measures taken to carry it into execution. The Monongahela Incline-Plane Company was organized under the laws of the State and charter obtained in 1869, with a capital stock of \$75,000. The almost Herculean difficulties were surmounted, the work completed and the operation of this road commenced in May, 1870. Its success was assured in the feasibility of the plan, thus securing most incomprehensible benefits to the rapidly-growing borough situated upon this lovely summit. As an evidence of its success, we may mention that during the year 1878 the receipts were \$15,000. A double track is laid, with excellent and convenient buildings for stations at the base and summit, while the operating machinery is in an additional building on the summit, the engine house fronting on High St., northward. While one car ascends the other descends, and thus trips are made every five minutes throughout the day and until after midnight. The engine used is a twelve-inch cylinder, with two-foot stroke, and the boiler is Witherow Douglass' patent, and the steel-wire cables which are operated from the engine house over High Street, are of the most approved make for securing safety, and are supported on the track by wooden rollers. In addition to these, a second steel-wire cable is used, called a "drag cable," one and one-eighth inch in diameter, which is provided as a double surety against any accident, making it an utter impossibility that any accident of a serious nature could ever occur. The length of the plane is 640 feet, making an elevation of 370 feet, while the angle of the plane is 30 degrees. The cars, rope, and all parts of machinery are inspected daily, so that there is no more danger, indeed not so much as upon an ordinary street railroad. These high and beautiful elevations are brought into easy communication with the city and pleasant and inviting views presented to the lovers of all that is beautiful in landscape scenery where everything in nature and art combines to form loveliness and beauty. The beautiful rivers, the cities of Pittsburgh and Allegheny and the outlying country surrounding for a score of miles never loses its loveliness or attractions. The officers of this Company are: Samuel Harper, Esq., President; John Aull, Secretary and Treasurer; with Wm. M. Lyon, M. Bailey, Witherow Douglass, John S. McMillin, Wm. Halpin, Geo. W. Betzhoover and John L. Aull, Directors. No stranger should visit Pittsburgh without taking a view both in daytime and at night from Mount Washington.



REED & CO.—Advertisers' Agents, 55 Fifth Av., First National Bank Building.

The absolute necessity of advertising to the mercantile community, and the annoyance as well as difficulty of giving personal attention to the details of this essential department in every well conducted business, has naturally led to the establishment of agencies through which to reach the various mediums in any given district. It has been the course of these agencies in the past to represent certain papers for which to obtain from advertisers the largest possible price for the matter inserted, which order of doing business has been lately entirely revolutionized by Reed & Co., who may be more accurately called "Advertising Brokers" instead of "Agents," inasmuch as they represent not the papers, but the advertiser instead. This firm's mode of doing business is, as before intimated, to manage to the interest of the advertiser in securing the best possible terms from the various journals conducive to the advantage of their patrons, thus procuring contracts, from their knowledge of actual worth and extensive dealings, at a much less cost than could be stipulated for by any private or separate concern. This business was established upon this improved plan in 1875 by Mr. C. McF. Reed, the present senior partner, and has met with the most substantial success, engaging the attention of one book-keeper and from two to four solicitors. The firm has special arrangements with all the various newspapers within a radius of one hundred miles, making a specialty of advertising manufacturers in all the leading class journals of the United States, by which special advantages are secured for the advertiser, who is, if desired, relieved even from the onerous duty of furnishing the copy. Messrs. Reed & Co. contracting to conduct every part of the business, upon terms that prove highly advantageous to those who avail themselves of this house. Mr. Reed is a native of Washington, Pa., where he was born in 1848, removing to this city and becoming a permanent resident here in 1873, from which date to 1875 he was engaged as publisher of "The People's Monthly," since which latter date he has been identified with his present vocation, in which his aptitude is widely recognized. The firm is a particularly pleasant one with which to transact business, and to those who are seeking the best means of bringing their trade to the notice of the public, Reed & Co. are cordially commended as being able to assist and advise them in a very effective manner, and at a saving of a large percentage on contracts.

LINDSAY & McCUTCHEON,—Iron Manufacturers, Rebecca St., Allegheny.

Messrs. Lindsay & McCutcheon occupy a prominent position among the industrial avocations of this community. Established in 1863 by Messrs. Jas. H. Lindsay and H. D. Whipple, the house was founded with a capital of very limited proportions in cash, but an extensive fund of experience, tact and resolution from the very first, assuring the brilliant success that followed. In 1864 Mr. Whipple retired from the concern and was succeeded by Mr. James McCutcheon, when the present style of firm was adopted. Devoting itself especially to the manufacture of hoop, band and horse shoe iron, cotton ties and horse shoes, the product of the house became widely recognized for its excellence, naturally resulting in a rapidly augmenting trade. Various improvements and additions were made to the works which are now classed with the largest and most complete in the country. They consist of two main iron roofed structures respectively 225x127 and 90x220 feet, together with numerous smaller buildings, covering in all an area of more than two acres. The manufacturing operations are sub-divided into three departments, the machinery of which is operated by ten engines with eleven boilers, embracing a total of 550 horse-power and employing 270 men and boys, requiring an outlay to this source alone of over \$120,000 per annum. Several valuable patents have been secured by this house in the line of their manufactures, particularly on machines for making horse shoes and cotton ties, the former being turned out at the rate of 60 per minute. In order to secure a coal supply for themselves, the firm some time ago secured the new Eagle Coal Works, at Monongahela city, a fine property of 160 acres, with mining capacity of 6,000 bushels per day. In operating these works the house have invested a capital of \$10,000. They employ 100 hands, 64 coal cars, 4 mules, one coal tippie, 13 flat boats, steam engines, boilers and other machinery, producing about 1,200,000 bushels of coal per annum, at a cost for labor of nearly \$6,000 per month. This product, large as it seems, and convenient for shipment to the works, falls considerably short of the requisite amount to supply the consumption of the mills. Both members of this firm are not only active and indefatigable in their immediate business, but are largely connected with other enterprises—banks, insurance companies, successful corporations, and the municipal government. Considered individually and as a firm, there are few concerns that conduce more to the general prosperity or receive a greater share of the public esteem and appreciation.

B. H. LUBBERS,—Wines and Liquors, 386 Fifth Av.

The wholesale and retail establishment of Mr. B. H. Lubbers was founded in 1864 by the present proprietor, and is one of the most widely known and firmly established houses in this line of business to be found in the Iron city. Mr. Lubbers keeps constantly on hand the best brands of foreign and domestic wines and liquors, and makes a specialty of champagnes and bottled beer. M. Werk & Son's celebrated brand of Golden Eagle Champagne may always be found at this establishment by the case or single bottle. Mr. William Moeck has charge of the books and office department and is thoroughly conversant with all the requirements of the trade. Mr. Lubbers was born in Holland in 1820, he came to the United States in 1837 and located in Pittsburgh in 1864, establishing his present flourishing business the same year.

P. SEIP,—Fine Confectioneries & Candies, Bread & Cake Baker, 4303 Butler St.

Mr. Seip has in his store room a fine stock of candies, confectionery, cakes, etc. The business was started in 1869 at the corner of 21st street, moving from there to present location in 1871. Mr. S. was born in Germany in 1806, came to the United States in 1833, stopped in Chambersburg, Pa., five years. Was overseer for two years of a negro plantation in Virginia, came over the mountains to Pittsburgh in an old Conestoga wagon, in 1838; working at laboring work of different kinds after coming here, at very low wages; in 1841 he started a grocery store in the old Fifth ward, afterwards added hardware to the business, continuing in that business 17 years. In 1859 he bought a farm, living on it ten years, returning from that he embarked in present business, his son having acquired a knowledge of the bakery and confectionery business.

CRAIG & WILSON,—Groceries and Feed, 329 Fifth Avenue.

The business now conducted by the above-named firm was originally established by Mr. Henry Swan, who was succeeded by the present firm. They carry a large and desirable stock of Choice Family Groceries of every description, at wholesale and retail, also a Feed Department, where all kinds of Grain, Oats, Meal and Mill Feed is kept constantly on hand. S. H. Wilson is a native of Pittsburgh. Mr. Wm. Craig was born in Allegheny county in 1840.

HERMANN RUFF,—Practical Hatter, 203½ Fifth Av. Extension.

Mr. Ruff commenced business at his present location April, 1, 1877. He is a thorough practical hatter, manufacturing every description of silk and felt hats of the finest quality. He makes a specialty of manufacturing fine hats to order and of altering silk and felt hats to the present style at moderate prices. Mr. Ruff was born in Germany in 1837, and has resided in Pittsburgh since 1876, where he has built up a thriving and prosperous business.

THE BANK OF PITTSBURGH,—Fourth Avenue.

It is instituting no invidious comparison between the banks of Pittsburgh and other financial institutions of this city, to say that the former occupies a position in virtue of its age, history and magnitude, in a fiduciary sense, peculiarly eminent and peculiarly its own. Organized in 1810, and chartered by special enactment in 1814, the Bank of Pittsburgh from that time has wielded a controlling influence upon the finances of this community, an influence uniformly of the most benign character consistent with the successful management of any monetary concern. This is one of those signally few institutions in the United States which can properly be said never to have suspended specie payments, though, as noticed in the editorial of this work, there were a few days in 1837 when by a formal request of the citizens the bank withheld its bullion. At all other periods, however, and even at that time, the policy of the bank was held inviolate, that its obligations issued upon a coin basis were at all times redeemable in coin. During the disastrous years of 1839, 1841, 1857-8 and 1861, when nearly every banking institution in the country suspended specie payments, this financial Gibraltar continued to disburse gold, and in pursuance of this policy paid out between December 30, 1861, and December 1, 1866, \$1,374,938.99 in bullion. The capital of the Bank of Pittsburgh is \$1,200,000, and its accumulated surplus \$244,996.40, while a line of deposits is carried ranging in round numbers, \$1,500,000. Among its officers and directors will be observed names that are synonymous with integrity and closely associated with the history of Pittsburgh's progress and development in the material industries for which she is celebrated. The first president of the institution, elected in 1814, was William Wilkins, who heads the list of chief executive officers, the same being in order of office as follows:—John Darragh, John McDonald, Wm. H. Denny, John Graham and John Harper—the last named incumbent at the present time. On the first Tuesday of May, 1815, the bank declared its initial dividend of four per cent., and from that time, with no omissions, and unflinching regularity, semi-annually, on the first Tuesdays of May and November of each year, a division of the profits has taken place. The total amount of earnings so disbursed reaches in the aggregate the sum of \$4,728,793.66, which till 1833, when the capital was increased to its present dimensions, was derived from an actually paid-up capital of only a quarter of a million dollars. During the late war the Bank of Pittsburgh loaned to the general Government \$820,000 and to the State \$90,000, besides contributing voluntarily to the aid of volunteers and the construction of home defences \$16,280. Originally a bank of issue, since 1862 its notes have been destroyed as fast as redeemed, and at this time none are in general circulation, the books showing the outstanding paper to be only \$18,000, much of which is presumed to have been lost, mutilated beyond recognition or consumed by fire. The untarnished policy of commercial honor that has always controlled the operations of the Bank of Pittsburgh seems to have had a powerful reflex influence upon those with whom it establishes business relations, as an evidence of which it may be stated that, though many of its customers were bankrupt and utterly ruined by the great fire of 1845, yet, strange to say, the bank did not lose a dollar by this disastrous conflagration. The chief executive of the institution at the present time is, as before mentioned, Mr. John Harper, who for nearly half a century has been identified with it, having acquired his present position through the channels of promotion from subordinate offices. Wm. Roseburg, Esq., Cashier, has also been connected with the bank for no ordinary period, aided by John A. Harper, Esq., Assistant Cashier. The Board of Directors is composed as follows: John Harper, President, Wm. Morrison, Joseph Woodwell, Reuben Miller, Jas. Dalzell, Wm. McKnight, Chas. Hays, Wm. A. Caldwell, Wm. Holmes, Hon. James Veech and Hon. Felix R. Brunot, gentlemen too well and widely known in this community to require personal mention or individual assignment. The subordinate officers of the bank are M. W. McMillan, General Book-keeper; Thomas B. McMillan, Individual Book-keeper; Charles S. Graham, Discount Clerk, and others in minor positions. The bank effects foreign and eastern exchanges through the National Bank of Commerce and the Mechanics National Banks of New York City. The oldest bank in Western Pennsylvania, with a history reaching through three wars, always patriotic, lending to the Government in troublous times when others shrank back, giving liberally, even with prodigality, for sanitary purposes during the late rebellion, the Bank of Pittsburgh is an institution of which every citizen is justly proud and in the possession of which the Iron City is to be felicitated.

Wm. Wilkins, 1st President, John Darragh, 2nd President, John McDonald, 3d President, Wm. H. Denny, 4th President, John Graham, 5th President, John Harper, 6th President—succeeded 1866, connected with the bank since 1832 and for a long period filled the position of Cashier. 1st Cashier, Alexander Johnston, Jr., 2d Cashier, John Snyder, 3d Cashier, John Harper, 4th Cashier, Wm. Roseburg. National and State taxes paid since 1850 aggregate about \$700,000. Never failed to pay a dividend.

AMERICAN BANK,—Cor. Wood St. and Sixth Av.

This widely-known and favorite financial institution was organized in 1869 with a capital of \$200,000. By the organization effected John Floyd, Esq., practically the founder of the institution, became President and Wm. Floyd, Cashier. Mr. Floyd is one of the merchants of the old regime. Mr. Wm. Floyd, the Cashier, enjoys a high reputation for capacity as a financier. The Board of Directors is composed of the following gentlemen:—Hon. Thos. M. Marshall, Attorney-at-Law; James W. Anote, Underwriter; Jno. M. Murland, Real Estate; Archibald Wallace, Wholesale Grocer; James D. Kelly and James Borard, Manufacturers, who succeed Charles B. Leech, late deceased. Under the supervision of this Board the prosperity and success of the concern was a "foregone conclusion."

PETER ZERN,—Tobacco and Cigars, 400 Penn Av.

One of the best known Cigar and Tobacco establishments in Pittsburgh is that of Peter Zern, Esq., at No. 400 Penn avenue. For the past fifteen years Mr. Zern has been engaged in business on this same square. He carries a fine stock of imported and domestic Cigars, Manufactured Tobacco, Smokers' Articles, etc. Among his special brands we notice "Our Mary" and "Zern's Delight," which are deservedly popular. Mr. Zern has resided in Pittsburgh for the past forty-two years and has taken an active part in State and municipal affairs, having great influence in that section of the city. He was a member of the State Legislature from 1875 to 1878 inclusive, represented his ward in the councils of the city for six years—five years in the common and one year in the select branch.

CENTRAL HOTEL,—Geo. J. Bridge, Propr., 17 Carson St., South Side.

This house is a large and handsome building of brick and stone, having a frontage of 70 feet on Carson street and extending back 60 feet—four stories high. This establishment, which may be considered the leading hotel on the South Side, affords ample and superior accommodations at moderate charges. It deserves and receives a large share of patronage. Mr. Bridge enjoys the confidence of his patrons, and those who favor his house with a call will always find him anxious to contribute to their comfort.

PROF. SLACK DAVIS,—Instructor, 285 Fifth Avenue.

All persons interested in education, which alone can elevate the standard and promote the happiness of mankind, are conscious of the importance of securing for their children, or those in whom they are interested, the most able, accomplished and thoroughly qualified instructors. We take pleasure in assuring those who may peruse this work that in this avocation there are none in this city who bear a higher reputation than Prof. Slack Davis, not only for high moral character and attainments, but also for that gift which is in a great degree intuitive, of communicating or transmitting knowledge and its value to others. Professor Davis gives instruction privately, or in classes, in all branches of English and classical education, and we cordially join the number of his patrons and pupils of this city in according him the fullest commendation.

BRIGGS & DRUM.—*Com. Merchants of Cattle, Hogs & Sheep, Central Stock Yds.*

To many the large amount of business conducted at the Central Stock Yards will be a matter of surprise. We proceed here to give a brief notice of one of the most prominent and leading firms associated with this branch of business; Mr. C. Q. Briggs having previously had a thorough knowledge of the general stock trade, commenced business here in 1871, afterwards associated with himself Mr. John Drum, and the business is now conducted under the above firm name, with Mr. C. Q. Briggs cattle salesman, Mr. L. Dyer, hog salesman, and Mr. John Drum, sheep salesman, S. R. Sedwick, agent, Indianapolis, Ind. Those who may not be familiar with them can refer to T. Robinson, Columbus, Ohio, C. M. Keys, East St. Louis, Ill., Weber, Loper & Co., Cincinnati, and City Deposit Bank and Trust Company, Pittsburgh. Messrs. Briggs & Drum are perhaps the most extensive operators and enjoy the most superior facilities for the disposition of stock of any firm in this city. They have ample capital and their transactions for the year will foot up to about \$2,000,000. Besides providing for each department a special salesman, they employ several extra men in the business. Mr. C. Q. Briggs was born in Ohio in 1831 and Mr. Drum in this city in 1837. These gentlemen are men of high standing in the community and are eminently entitled to the popularity accorded to them.

ARSENAL BANK.—*Butler and 43rd Sts.*

This popular and reliable institution has now been in existence eight years, having been chartered in 1871, during which time it has successfully competed with older and larger institutions and has won a high degree of public favor as a reliable and solid bank. Its capital is \$55,000 and it has an average deposit of \$150,000; its influence and popularity is yearly extending under the popular management of its enterprising officers. Mr. S. J. Wainwright, the senior member of the firm of Z. Wainwright & Co., is president; Mr. G. C. Gerwig, the cashier, is a native of Allegheny city. He has held the position of cashier in this bank for a number of years, and the success of the institution is largely due to his abilities as an able financier—previous to his connection with this bank he had been connected for many years with other banking institutions, acquiring a thoroughly practical knowledge and experience so necessary in financial matters. The directors are all men of high ability and integrity, the board is composed of S. J. Wainwright, J. C. Wainwright, H. E. Wainwright, J. W. Campbell, Wm. Bowersmith, J. C. Wallace, G. W. Smith, James Sugden, Samuel McKinley, Wm. Reardon, R. J. Richardson, T. H. Sugden, all of whom are well known and respected citizens.

F. BAXMYER & CO.—*Flour, Feed, Groceries, &c., Washington Av., 31st Ward.*

With an ample capital for the transaction of the business in the start, this firm commenced business in their present location, Washington avenue, 31st ward, in 1876, as a branch store of house on Bingham street and Diamond, South Side, since which time the business has met with a liberal patronage. They keep a choice stock of flour and feed and an ample stock and variety of groceries and provisions, embracing every desirable article usually found in a first-class grocery and provision house. The members of the firm are Mr. Henry Logeman, Mr. Henry Rudel and Mr. F. Baxmyer, of the same firm on Diamond, South Side, each of whom is an accomplished business man. They deliver goods free to any part of the city. This is the only firm that handles the "Ocean Spring Mill" brand of flour, which has no superior in this city or State. The principal store of this firm is on corner of Bingham and Diamond, South Side, where they have been established for many years and well known. Mr. Henry Logeman was born in Prussia in 1843 and came to this city in 1849. The energy and enterprise, with which this business is conducted by these gentlemen entitles them to a place among the principal business houses of this city.

R. S. HEMIUP.—*Dry Goods, Groceries, Boots & Shoes, 554 & 556 W. Carson St.*

This is one of the most prosperous establishments on the South Side of the city. A full and complete stock is always carried, giving the public a varied and select assortment of general merchandise to select from. The stock carried by this house embraces dry goods, trimmings, hats, caps, boots and shoes, groceries, provisions, hardware, house furnishing goods, etc. The premises occupied are two buildings which are well and conveniently arranged for business purposes. Seven salesmen or assistants are constantly employed; the trade of this house is steadily increasing from year to year, and a business of not less than \$100,000 is transacted annually. Mr. R. S. Hemiup is yet comparatively a young man, possessing good business qualifications. Some years ago he commenced business on a very limited capital, but by strict attention and judicious management it has rapidly grown, until now the house of R. S. Hemiup stands prominently among the leading retail houses of the Iron city.

BISSELL & CO.—*Stoves, Ranges, Grates, Fenders, Railroad-Car Heaters, &c., &c., 235 Liberty St. and 242 Penn Av.*



The firm of Bissell & Co. occupying the extensive ware-rooms at 235 Liberty street, and extending through to Penn avenue, are successors in a direct line to the first house in Pittsburgh which engaged in the manufacture of stoves, a business which has since become one of the leading industries of the city. Their foundry and shops are located in Allegheny city and are fitted up with all the appliances for turning out work of a superior character. Besides their extensive production of a great variety of Cooking, Parlor and Heating Stoves, Ranges and Grates, they manufacture several specialties, amongst which are their "Peerless" Shaking Grates and Safety Railroad Car Stoves. Their "Peerless" Grates, adapted for the use of either hard or soft coal, have met with a ready sale throughout the entire extent of this country and Canada, and judging from the rapidly increasing demand and the many medals and premiums received, they must be the best grates at present in the market. Their Safety Car Stove, called the "Bissell Safety Car Stove," is the result of a long series of trials and experiments, and having been thoroughly tested by some of our leading railroad men is by them pronounced a decided success. This stove is so constructed that in the event of accident the fire is instantly extinguished, thus insuring safety to life and property; besides these important features the stove is handsome, durable and a powerful heater, being the only railroad stove known of that thus fully meets all the requirements of the times. In addition to the above lines of goods of their own manufacture, Bissell & Co. deal extensively in marble and slate mantels, and show in their ware-rooms the finest assortment of these goods to be found in any city.

in the country. In conclusion we can only say that for beauty of design, superiority of workmanship and perfection of finish Bissell & Co.'s products will take rank with those of any house in this country.

PITTSBURGH FOUNDRY,—A. Garrison & Co., Office, No. 6 Wood St.

There is much that is of more than ordinary interest in the contemplation of the rise and progress of the Iron interests associated with this city. Its development in its various branches has called into active employment thousands of laborers, and exhibited as high a degree of executive and financial ability as any operations in which human energy and enterprise have been employed. There is perhaps no one establishment to which Pittsburgh is more indebted for the enviable and world-wide reputation enjoyed, which stands more conspicuously before the public for the magnitude of its transactions than that of the Pittsburgh Foundry, which has had an existence of over half a century; and in a work of this nature, giving somewhat in detail the prominent industries and activities of the Iron city, the firm of A. Garrison & Co. are entitled to more than a passing notice. Through the vicissitudes of trade and the various financial embarrassments which have affected the nation since the organization of this establishment, it has maintained an unblemished character, and continued its operations upon the most honorable and successful basis. The works of the Pittsburgh Foundry are situated at the corner of 9th and Birmingham streets, Birmingham, where the plant covers an extensive area, and where every facility, which the gradual development of time and experience has been able to suggest as an auxiliary to the production of the highest grade of products in this line, has been from time to time promptly introduced, until now the machinery and appliances employed by this firm are unsurpassed by any similar establishment in the country. The specialties to which the firm are devoted are Solid and Hollow, Chilled, Sand and Patent Homogeneous Steel Rolls and Rolling Mill Castings. It is unnecessary here to enlarge upon the quality of the Rolls produced by the Pittsburgh Foundry, because they have by their superior excellence established for themselves a permanent and enduring reputation, which has created a demand through all parts of the country, and the enterprising character and liberal policy pursued by this firm in all its operations and business transactions warrants the highest confidence in the superiority of its products. There are few among those engaged in the enterprises of magnitude in this city, who have held so long and continued association with its industries as that of the senior member of this firm. Mr. A. Garrison became associated with this enterprise about forty-six years ago, which marks a period of the most rapid strides of science, national and commercial growth, and yet in these years this establishment has kept in the van of progression and now stands unrivaled both in its facilities and products.

DILWORTH, PORTER & CO.—Railroad & Boat Spikes, Angle Bars & Bolts, Office, No. 5 Monongahela House; Works, South Side.

For the extent of its operations and the high quality of its products, the establishment of Dilworth, Porter & Co. bears an enviable reputation and is justly entitled to more than brief mention in connection with other enterprises through which the celebrity of Pittsburgh as a manufacturing center has been so thoroughly established. Founded in 1852 by and under the style of Porter, Rolfe & Swett, the house assumed, five years later, its present title and status, continuing from that period a career of unbroken prosperity and usefulness. The inception of the enterprise was by no means upon a scale of such magnitude, its growth being the result of more than a quarter of a century of honest and inventive effort. New devices, ingenious machinery and labor-saving and perfecting appliances have been gradually introduced, with widening experience, until the present plant of the firm is justly regarded as being the largest and most thoroughly equipped of any similar concern in the country. As an illustration of the truth of this statement, it may be said that the works which are located on the South Side cover an area of over two acres, and employ about two hundred workmen, most of whom are skilled artisans, the monthly disbursement to this source alone averaging \$12,000. Much of the machinery was patented by the firm, and is exclusively controlled by it; requiring two steam engines of two-hundred horse-power to supply the necessary motive force. The products of the concern are Railroad and Boat Spikes, Solid-Lap, Wrought-Iron Railroad Chairs, Fish Bars, Angle Bars and Bolts, the annual capacity being about 8,000 tons, and the trade extending over the entire United States, being, however, mainly in the West and North-West.—The individual members of the firm are Joseph Dilworth, George Porter, H. M. Rolfe, and James H. Swett, all of whom are prominently identified with the industrial interest and material development of this city.—With a history extending over so considerable a period, and a record untarnished by any defection from an honorable business policy, keeping equal pace with every progressive movement conducive to a higher grade of product or the improvement of the condition of its dependents, the house of Dilworth, Porter & Co. has justly achieved with its success a reputation that confers upon it the respect and confidence of all those with whom it has established commercial relations, as well as the public at large.

H. W. FULTON, M. D.—Penn and Hiland Aves, East End.

Doctor Fulton is a native of Westmoreland Co., Pa., and was born in 1838. Just at the close of his classical and academical course under Dr. Donalson at Elder's Ridge Academy, the war broke out and young Fulton, with many of his associates, went out with the "three months' men," subsequently enlisting in Col. Jarrets (53rd) regiment for the war. His quick intelligence and attention to duty, together with his soldierly bearing and genial disposition, soon attracted the notice of the general officers of the corps, and he was detailed and assigned to headquarters on duty in the Signal Corps. Here during the war he attained eminence and was mentioned in dispatches from chiefs of this particular and most exacting department of the service to headquarters in the most flattering reports. Upon the expiration of a 3 years' term of service he began the study of medicine with Dr. Willard of Allegheny City, and graduated with honor at the Philadelphia Hahnemann College in 1872, and located in what is known as East Liberty, 19th ward, in the Spring of the same year. Among the members of his profession, Dr. Fulton is ranked in the first class as a physician and surgeon, and by all the community as a cultured gentleman and one of the most liberal and enterprising citizens.

F. HAMPE,—Hotel and Groceries, Main Street, Mount Oliver.

Among the leading business houses of Mount Oliver is the Hotel, Grocery and Provision Store of Mr. F. Hampe. He started the business in 1862, and has all along enjoyed a good patronage. The business is embraced in a three-story brick building, 40 x 45 feet in size, and a frame building two stories high of the same dimensions. His stables are 24 x 90 feet in size. He owns one of the most prominent residences in that locality, with grounds surrounding beautifully envired with trees, shrubs and flowers. This site commands a fine prospect of all points of the compass: it is in sight of the Mount-Oliver Incline-Plane, of which Mr. Hampe is one of the original directors. He was the originator and principal projector of the Mount-Oliver Insurance Company, of which he was elected President, which position he still holds. The Hotel of Mr. Hampe is a popular and desirable stopping place, and enjoyed by all who stop there.

CHAS. F. NOURSE,—Druggist and Pharmacist, 190 Centre Av

Mr. Charles F. Nourse started in business in the spring of 1873. Dr. Nourse carries a full line of Drugs, Medicines, Chemicals, Paints, Varnishes, Fancy Goods, Perfumery, Toilet Articles, etc. Dr. Nourse is a native of Lancaster City, Pa., where he was born in 1845, and came to this city in 1873. Special attention is given to filling physicians' prescriptions.

McVAY & WALKER.—Manufacturers R. R. Cars, Car Castings and Irons, *Pitt Cars, Wheels and Coal-Works Castings, Oil-Rig Irons, &c., Braddock's Field, Pa.*

Among the most extensive manufacturing establishments in the environs of Pittsburgh must be classed the works of McVay & Walker, located at Braddock's Field, on the line of the B. and O. R. R., and about eight miles from the center of trade. The firm was organized in 1863 and the buildings erected in 1864, and form in all a plant of large dimensions. The various structures are at present of the following dimensions: one building 91 x 165 feet, one 60 x 120 feet, two 40 x 100 feet, besides blacksmith shops and other buildings, yards for sidings, metal, and covering in all an area of several acres. Nine forges are in constant operation, the consumption of iron daily amounting from two to eight tons, and from 25 to 80 skilled artisans are employed, the number depending upon the exigencies of the trade. The establishment is divided into three main departments, in which is carried on the work of Founding, Car-Building and Forging, the products consisting of all varieties of Railroad and Coal-Works Castings, and Forged Irons, as well as the manufacture of Railroad, Pit and Dump Cars of every description. With reference to the latter, it should be stated that Thomas McVay, the senior partner, has invented an automatic Dump Car that possesses many advantages over anything of the kind made, and over similar devices heretofore introduced, having advantages in construction and operation of marked superiority. The business of the house, which was begun on a very limited scale, now extends over the entire United States, an order for 100 Mining Cars being lately filled for the Colorado Mining Co., Colorado.—The individual members of the firm are Messrs. Thos. McVay and Thos. Walker; the former is a native of Washington county, this State, and was born in 1815. At an early age he acquired the blacksmithing trade, and in 1836 removed to Pittsburgh, and, in the pursuit of his avocation, with a gradually widening range, has achieved a substantial success. Mr. McVay is an expert and practical mechanic, as evinced in the construction of the Dump Car heretofore referred to, and other useful and ingenious devices. Mr. Walker is a native of Pittsburgh, and has always been a resident of this city. At an early age he became an apprentice to James Rees, where he learned thoroughly the trade of machinist, which he followed until his association with Mr. McVay in the present enterprise. Both gentlemen are widely known and esteemed, and both, at various times, have been elected to city councils, in which body their advocacy of every measure designed to promote the general welfare is recognized and appreciated by the community.

WILSON, SNYDER & CO.—Brass Founders, Iron Pipe Fitters and Steam Pump Manufacturers, Nos. 51 and 52 Water St.

Intimately connected and identified with the industries of the Iron City, this firm—established by Messrs. R. J. Wilson, August Snyder, Robert Marks and Joseph Hite, in 1875—has developed into a prominence commensurate with its multifarious products and the justly-celebrated excellence of its work. The business and manufacturing premises occupied by the house are situated at Nos. 51 and 52 Water St., and 44 and 46 First Av., and consist of one extensive double-brick edifice, two stories in height, 54 x 160 feet, and divided into the five following departments: pattern shop, machine shop, brass foundry and finishing shop, steam-fitting and pipe-bending; all of which are supplied with the most improved tools and machinery, operated by one thirty horse-power engine. As manufacturers of or dealers in Wrought and Cast-Iron Pipe, Brass and Iron Valves, Snyder's Patent Cocks, Lubricators, Whistles, Tools, Malleable and Cast-Iron Fittings, Gauge Cocks, Oil Cups, Gum Hose and Packing, Standard Bronze and Brass Castings, Babbitt's Metal, Steam, Water and Blast Gauges, the firm does a large and extended trade through Pennsylvania and contiguous States, besides fitting up Rolling Mills, Blast Furnaces, Coal and Coke Works, Oil Refineries, &c., making specialties of the Fort Pitt Steam Pump, patented by the firm, and Russell's Heater for Steam Boilers. As a manufacturing concern, this house enjoys a position with relation to the constructive industries of Pittsburgh that adds no little to the general repute and prosperity of the community. All natives of this city, the several members of the firm are not only practical and active workers in the various departments of their business, but vitally interested in every movement that tends to foster the general good. Compared with other establishments of like nature, this concern will rank with the largest, and in excellence of work is not surpassed by any. With a stock of \$30,000 in value, and an annual trade of from \$70,000 to \$100,000, every facility is afforded for the speedy and economical fulfillment of any contracts that may be awarded Messrs. Wilson, Snyder & Co.

THE AMBER BREWERY.—F. L. Ober & Bro., 12, 14 & 16 Vineal St., Alleg'y.



One of the most thoroughly-appointed and conveniently-arranged Breweries west of the mountains is that known as The Amber Brewery, located at Nos. 12, 14 and 16 Vineal St., Allegheny City, and owned and conducted by Messrs. F. L. Ober & Bro. The business was established in 1857 by Messrs. Leonard Schluffer & Weiser, who, in 1858, were succeeded by Koenig & Weiser. This firm was, in turn, succeeded by Ober & Koenig, in 1860. In 1863 Mr. George Ober became sole proprietor, and in 1877 his son, Mr. F. L. Ober succeeded to the business, and in the following year Mr. C. F. Ober became associated with his brother, under the firm name and style as at present. Under all these changes of administration, the quality of Beer manufactured maintained the same high standard of excellence aimed at from the start, and which has given the products of this establishment a wide-spread reputation. The original building in which this business was first commenced was a two-story frame structure, on the same site where now stands the magnificent monument of success. The old building was found inadequate to supply the rapidly-increasing business of the firm, and was demolished in 1870, and in its place was erected the commodious four-story brick edifice now occupied by the firm, covering an area of 180 x 245 feet, with a brewing capacity of 14,000 barrels, and a malting capacity of 30,000 bushels per annum. On the opposite side of the street is another building, used as a stable, 75 x 115 feet. The rock vaults or cellars are three in number, covering a space 30 x 120 feet, and are admirably arranged for the storage of Beer. An ice-house, with a capacity of 1500 tons of ice, is always supplied with crystal ice from Pine Creek, at Stewartstown, and an unfailing flow of pure and cool spring water is obtained from an artesian well 300 feet in depth.—The senior member of the firm is a practical brewer and maltster of more than fifteen years' experience, and exercises a general supervision over the various departments of this model establishment, in which ten competent workmen find steady and remunerative employment. Four double teams and a wagon for bottled Beer are kept busy delivering goods to their regular customers in the two cities.—In addition to the Brewery business, this house is largely engaged in malting for other breweries. Only the very best quality of malt and hops is used in this establishment, and, with the numerous advantages which we have already named possessed by this firm, it is no wonder that the Amber Beer has attained such an enviable reputation in this section. This Beer is specially adapted for bottling purposes, and the demand for it in this form for family and medicinal purposes is steadily increasing. Over 7,000 barrels of this delicious and invigorating beverage are annually disposed of in this immediate vicinity and in the oil region. An ingenious and elegantly-finished apparatus for showing the amount of gas contained in each barrel of Beer may be seen in the office of this Brewery, and is known as the Excelsior Pressure Regulator.—Both members of the firm are natives of Allegheny, and are active, energetic and reliable business men. They have had long practical experience in the business in which they are engaged, and thoroughly understand all its requirements. They manufacture as fine a quality of Beer as can be made in the United States, and are pushing their business vigorously and meeting with the most gratifying encouragement in every quarter. Mr. F. L. Ober devotes his entire attention to the general management and superintendence of the Brewery, and Mr. C. F. Ober presides over the office and financial department with marked ability. They are both genial and accomplished gentlemen, richly deserving the success which has already crowned their efforts to excel in the manufacture of a strictly first-class article, and the future prospects of this establishment are flattering in the extreme.

WOLFF, LANE & CO.,

(Sign of the Anvil,)

Importers and Dealers in

HARDWARE & CUTLERY,

50 Wood Street,

*C. H. Wolff, Jno. D. Cherry,
Thos. H. Lane, G. M. T. Taylor,
Horace G. Darsie.*

Pittsburgh, Pa.

See page 98.

CONSOLIDATED

FIRE EXTINGUISHER CO.

Manufacturers of FIRE APPARATUS of every description.

Office and Wareroom,

272 Liberty St., in Seventh Avenue Hotel,

PITTSBURGH, PA.

J. H. CONNELLY & SON, Agents.

See page 170.

PITTSBURGH

CAR WHEEL WORKS,

JOHN L. GILL, Jr., Proprietor,

Office, 83 Wood Street,

PITTSBURGH, PA.

See page 174.

S. Boyd,

D. T. Boyd,

J. B. Newin.

S. BOYD & CO.,

Wholesale & Retail Dealers in

LOOKING GLASSES, PICTURE FRAMES,

MOULDINGS, &c.

No. 100 Wood Street,

PITTSBURGH, PA.

See page 116.

NEW YORK & CLEVELAND GAS COAL CO.

Miners and Shippers of

Poughioghenvy Gas Coal,

GENERAL OFFICE:

89 Wood Street, Pittsburgh, Pa.

Branch Office: 130 Water St., Cleveland, O.

T. AXWORTHY, Agent, Cleveland, O.

See page 149.

D. W. C. BIDWELL & CO.,

GENERAL AGENTS

DUPONT POWDER CO.,

143 Water Street,

Corner Cherry Alley, PITTSBURGH, PA.

See page 175.

John C. Risher.

Stephen S. Crump.

J. C. RISHER & CO.,

Miners and Shippers of

COAL,

Office, No. 116 Water St.,

PITTSBURGH, PA.

See page 153.

Chas. B. Head.

Edw'd F. McElroy.

HEAD & McELROY,

GENERAL PRODUCE

Commission Merchants,

249 Liberty Street,

PITTSBURGH, PA.

See page 118.

Fairbanks' Standard Scales

OF ALL KINDS; Also, the

"Hancock Inspirator,"

THE BEST BOILER FEEDER IN THE WORLD;

Store, Warehouse, Platform, Railroad and Express Trucks and Baggage Barrows.

FAIRBANKS & COMPANY,

No. 48 Wood Street, Pittsburgh, Pa.

See page 110.

R. C. GRAY,

W. P. McCONNELL,

J. H. DUNLAP,

Gen'l Manager.

Secretary.

Sup't.

GRAY'S IRON LINE,

Office, 94 Water St., Pittsburgh, Pa.

R. C. GRAY & M. W. BELTZHOVER, - Prop'rs.

'Steamers "Iron Mountain," "Fearless," "Ironsides"; with 35 model barges. Special attention given to the transportation of STEEL and IRON RAILS and RAILROAD SUPPLIES, and Pittsburgh Manufactures generally, from PITTSBURGH to all points South and West.

See page 134.

JACOB J. BRONDER,—*Groceries and Produce, Brownsville Road.*

In 1853 the business of this house was established by Mr. A. Henger, now over a quarter of a century ago; it came into the hands of Mr. Jacob Bronder, who started in business here in 1862. He carries a stock embracing every desirable variety of staple and fancy family groceries and provisions, usually kept in an establishment of this kind, also coal, flour and feed and has a flourishing and gradually increasing trade to which he gives his personal attention. Mr. Bronder was born in this place in 1842, and is respected by a large number of friends and patrons for his genial manners and excellent business qualifications, and is worthy the remarkably excellent patronage he receives.

A. K. DUFF,—*Livery and Express Stables, Cor. Bingham and 16th St., S. S.*

This is an old established livery stand. Mr. Duff came to this stand in April, 1877, and since that time has conducted this business with eminent success. He started the South avenue hack line from this stand out the Brownsville road, running out five miles, carrying passengers and freight two trips daily both ways, and starting from here at 6.30 A. M. and 4 P. M. This is found to be quite a convenience and long-felt want now happily supplied by this enterprising gentleman. It is well patronized by the public. Mr. Duff has a good stock of Horses, Waggon, Hacks and Buggies, with which he can accommodate the public at all times with safe conveyances and drivers, and at very moderate charges, as he is highly appreciated in this business. He gives special attention to expressing goods, merchandise, or baggage to and from all the depots, and makes deliveries to all parts of the city. Moving a specialty.

RAMSEY & CO.—*Practical Druggists and Apothecaries,*

Main St., opposite P. O., Sharpsburgh, Pa.

The Drug and Prescription business of Ramsey & Co., on Main St., Sharpsburgh, was established by James Ramsey in 1875, who conducted the business up to the time of his death, when it passed into the hands of the present firm. They now carry a stock of about \$3,000 and enjoy a liberal share of the trade. The Store is in a three-story brick building, fronting 40 feet on two streets, the property of the F. and M. bank. The business is now conducted by E. Hack, salesman, O. Hamell, bookkeeper, and Mrs. Maggie E. Ramsey, widow of the former proprietor. The salesman is a practical druggist of several years' experience, makes a specialty of physicians' prescriptions, and understands the business in all its details.

W. A. MARTIN,—*Dealer in Groceries and Produce, 133 Center Av.*

This is an old established stand, Mr. Martin starting business in this place in 1859. He carries a general assortment and full stock of Family Groceries and Produce, and does a very fair business. His Store is situated on the corner of Green St. and Center Av., 24 feet front by 60 feet deep. With the assistance of his wife and daughter, he is at all times prepared to serve patrons with good goods and lowest prices. Mr. Martin is a native of Germany, born in 1816, and since 1854 he has resided in this city.

A. KUEHNEISEN,—*Hats, Caps, and Furs, 1410 Carson St., South Side.*

The Hat, Cap and Fur establishment of A. Kuehneisen, which is located at 1410 Carson St., and in which a very choice and complete stock of all the latest seasonable styles is constantly carried on, is a very popular one, and enjoys a large and growing trade. The business was started at this point a number of years ago by L. Kuehneisen, father of the present proprietor. This house has long been the leading one in this line of goods. Mr. Kuehneisen was born in New York city, but his parents removed to this city when he was but two years of age. He has since been identified with Pittsburgh, and is a popular, courteous and agreeable young gentleman.

DANIEL BRAUN,—*Dealer in Groceries and Produce, 145 Eighteenth St., S. S.*

Mr. Braun moved to this place, his own property, in 1877, with a capital of \$5,000. He always keeps a general assortment and a good stock of all the choice articles to be found in a well-stocked Grocery and Provision Store. Under his able management, the business is well patronized. He is a native of Germany, born in 1846, and came to this city in his childhood, in 1852, where he has remained. He was engaged in business with his brother in 1866, with a joint capital, then, of \$1500. He is well and favorably known, and all who patronize him will find him a clever business man to deal with.

WM. C. KLEIN,—*Groceries and Country Produce, 1710 Carson St., South Side.*

One of the leading dealers on the South Side is Mr. W. C. Klein, who started the Grocery and Produce business at his present stand, No. 1710 Carson St., in 1877. The demands of trade gradually increased until he is now carrying in stock a full and complete assortment of goods in his line of business; and he is doing a flourishing and prosperous trade. He occupies the building fronting Carson St., 24 x 80 feet in size, and employs several assistants. His trade is local, but is rapidly extending. Mr. Klein was born in this city, in 1853, and is thoroughly familiar with the locality and the wants of his trade. He is active, enterprising and honest, and is deserving of the patronage he so liberally receives.

ADAM HENNING,—*Manufacturer of Saddles & Harness, Mt. Oliver.*

Mr. Adam Henning started in the Saddle and Harness business here in 1866. Since then he has built up and established a very flourishing and remunerative business. He is located in a two-story building 36 feet square, Mount Oliver, opposite Geo. Goldbach's where he manufactures and deals in Saddles, Harness, Collars, Bridles, Halters, Check Reins, Whips, Blankets, Harness Oils, etc., and does Repairing neatly and promptly to order. His work is put up from good stock and warranted. To Custom Work he gives special attention. He was born in Germany in 1843 and came to this city with his parents in 1845, and has resided here ever since.

C. W. Bibus,—*Deutsche Apotheke, 20 Chestnutstr., Allegheny.*

Die Apotheke des Herrn C. W. Bibus befindet sich an der Ecke von Main und Chestnutstr., und wurde von dem Eigenthümer am 1. April dieses Jahres (1879) eröffnet. Derselbe ist höchst geschmackvoll und ansehnlich ausgestattet und angefüllt mit einem vollständigen Lager von Drogen, Medicinen, Toilettenartikeln und Parfümarien, ebenfalls Farben, Oele, Firnisse, etc., im Werthe von \$1,200. Er ist hiesig recht erfolgreich gewesen, und da er Meister von fünf verschiedenen Sprachen ist, so wird er sicherlich eine gute Unterstützung seitens der ausländischen Bevölkerung von Allegheny City erhalten. Herr Bibus wurde im November, 1853, in Detsch geboren und kam im August, 1874, nach dieser Stadt, wo er Anfangs unterschiedlich von den Herren P. Walter, Geo. A. Kelly und J. Abel beschäftigt wurde. Er ist ein Graduirter des Prager Apotheker-Collegiums und daher seinem Beruf vollkommen gewachsen. Er beschäftigt einen erfahrenen Provisor und die Apotheke ist Tag und Nacht offen.

WM. PICKERSGILL, JR.,
MANUFACTURER OF
BOOTS AND SHOES,

149 Wood Street,
Factory in Rear of Store,
PITTSBURGH, PA.

See Page 111.

CHARLES A. SCOTT,
GENERAL
BOOK & JOB PRINTER,

No. 132 Fifth Avenue,
"Methodist Recorder"
Building, **PITTSBURGH, PA.**

COMMERCIAL WORK A SPECIALTY.

See page 148.

TOTTEN & CO.,
Fulton Foundry,

Cor. 24th and Railroad Streets,
PITTSBURGH, PA.
Only Makers of
**HOLLOW CHILLED ROLLS, CHILLED
GROOVE ROLLS.**

See page 135.

Thos. Wightman & Co.,
Glass Manufacturers,

43 Wood Street,
PITTSBURGH, PA.

See page 187.

FRANK ARMSTRONG,
SUCCESSOR TO
PITTSBURGH NATIONAL COAL & COKE CO.

OFFICE AND YARD:
Corner Fourth Avenue and Try Street,
PITTSBURGH, PA.
Best Family Coal, Nut Coal and Slack, always on hand.

See page 101.

GARDNER BROTHERS,
CLAY GAS RETORTS AND SETTINGS.

Fire Brick, Tile and Furnace Blocks,
BRANCH OFFICE, 116 SMITHFIELD STREET,
PITTSBURGH, PA.

Works, Lockport, Pa., and Mt. Savage Junction, Md.

See page 192.

COYNE & HATRY,
Patentees and Builders of
PATENT AUTOMATIC NAIL SELECTORS

AND
Improved Cut Nail Machines,
OFFICE, 114 & 115 Water St.,
WORKS, cor. 28th & Smallman Sts.,
PITTSBURGH, PA.


See page 125.

LEVIS & BICKEL,
COUNSELLORS AT PATENT LAW,
SOLICITORS OF PATENTS,

Patents, Re-Issues, Designs, Trade-Marks, Interferences,
Copyrights, Labels.
131 Fifth Avenue, above Smithfield St.,
(Opposite M. E. Church.)
PITTSBURGH, PA.

See page 146.

W. C. BERINGER & CO.,
Claim and Patent Agents,
116 SMITHFIELD STREET,
PITTSBURGH, PA.


 Pensions and Patents procured. Bounty, Prize
Money, &c., Promptly Collected.
SPECIAL ATTENTION GIVEN TO THE SALE OF PATENTS.

See page 172.

T. C. Kier. H. E. Kier. W. L. Kier.
KIER BROS.,

Successors to S. M. Kier & Co.,
MANUFACTURERS OF
FIRE BRICK
"Salina" and "Summit Cut" Brands.

Tiles and Fire Clay Prepared to Order.
Office, 369 Liberty Street, **PITTSBURGH, PA.**

 Medal and Diploma awarded by Centennial Com-
mission, International Exhibition, Philadelphia, "for
Good Reputation and Standard Value."

See page 196.

ST. VINCENT'S ABBEY AND COLLEGE,—*Westmoreland Co., Pa.*

The Abbey and College of St. Vincent is situated in Westmoreland county, Pennsylvania, forty miles east of Pittsburgh, two miles from Latrobe, and one from Beatty's Station. St. Vincent's Abbey is a colony of the Abbey of Metten, a Benedictine monastery on the river Danube, in the kingdom of Bavaria, which was established by Charlemagne during his war with the Avars, in the year 796; secularized in consequence of the peace of Luncville, A. D. 1803; and re-established by King Louis I., of Bavaria, in 1830. The order of St. Benedict has a history of almost fourteen hundred years, having been founded in the year of our Lord 500, in Italy, by Saint Benedict, the son of a Roman senator who established the famous monastery of Monte Cassino (near Mt. Vesuvius), which is still in existence. In 1846, Gregory Scherr (late archbishop of Munich), the first abbot of (new) Metten, at the request of the Bavarian Missionary Society, sent to this country the Rev. Boniface Wimmer, with four clerical students and fifteen lay brothers, for the task of establishing a branch of the order in America, and to erect one or more monasteries and schools for the education of youth, and particularly as seminaries for the education of German Catholic priests, to take charge of the rapidly increasing German Catholic population of the United States. Father Wimmer and his associates were most graciously received, upon their arrival in this country, by Rt. Rev. Doctor O'Connor, bishop of Pittsburgh, who was anxious to secure to his diocese the aid and services of the Benedictine brothers from Bavaria, and who offered them the church farm of St. Vincent as a desirable and convenient location for the proposed monastery. Father Wimmer, during the same year, took formal possession as pastor of St. Vincent's congregation, Rev. M. Gallagher resigning in his favor, but remaining as assistant pastor for the English-speaking portion of the congregation. In 1830 a church and parsonage had been erected at the place by Rev. T. O. Stillinger, to which Father Gallagher had subsequently added a school-house. In addition to these buildings, an old log-house was yet standing, which was erected in 1789 by the first missionaries at this point. When Father Wimmer arrived, the parsonage was occupied by the Sisters of Mercy, the priest lived in the school-house, and the log-house was used as a residence by the tenant of the farm, Mr. Schowalter, with his large family. The Benedictines were compelled to take up their quarters in the school-house, which, thereby, was unpleasantly crowded. In the following May, the Sisters removed to Saint Xavier's, where they established a convent and an academy. Father Gallagher removed to Philadelphia, where he joined the Augustinians, and the place was left to the Benedictines. They were reinforced in August, 1847, by another detachment from Bavaria of candidates for the order, who immediately proceeded to build the monastery and work upon the farm. Father Wimmer and the young priests whom he had got ordained attended to the missions and to the instruction and education of boys. At this time there was no Catholic institution of learning near or far, nor was there any German Catholic priest in Western Pennsylvania, with the exception of Rev. N. Lemke, who was located in the wilds of Cambria county, and in the city of Pittsburgh, where two Redemptionist fathers had located and erected St. Philomena's church. In 1850 the new institution was acknowledged as a monastery, and in 1855 as an Abbey, when Father Wimmer was made Abbot—first for a term of three years, and in 1865 for life. Meantime the number of priests increased, and their sphere of usefulness enlarged. Some took charge of the German Catholic population in Cambria county, and established a priory in Carrolltown. Others took charge of a German colony in Elk county, and erected the priory of St. Mary's, from which they, for many years, attended to all the German Catholic congregations in North-Western Pennsylvania. Others settled in the city of Newark, New Jersey, where they have two congregations under their charge and a college. Others went to Stearns county, Minnesota, where they established first a priory, which, in 1866, became an abbey, and has now a large and flourishing college connected with it. Another party was sent to Atchison, Kansas, where they likewise established a priory, which became an Abbey in 1876. There are now, also, houses of the order in Allegheny City, Pa., Covington, Ky., Erie, Pa., Chicago, Ill., Baltimore, Md., Richmond, Va., Kidaway Isle, near Savannah, Ga.; near Charlotte, N. C., Tusculum, Ala., Covington, La., &c. Abbot Boniface Wimmer is also Abbot-general of the other houses and establishments mentioned above, of which St. Vincent is the mother.

ST. VINCENT'S COLLEGE, which was founded in 1846 by the Rt. Rev. Boniface Wimmer, O. S. B. of St. Vincent's Abbey, is now one of the largest Catholic institutions of learning in this country. It is adapted to the requirements of the country, most of the teachers being of American birth, although proper attention is yet paid to the German element. Many of the professors have been educated in the universities of Rome, Innsbruck and Munich. The College of St. Vincent was chartered in 1870. The students are divided, according to their ages, into three classes, each of which has its own study hall and dormitory, and is under the control of two prefects. The College possesses a large library, excellent chemical and philosophical apparatus for the use of more advanced students, a splendid collection of minerals, shells and plants, a valuable and interesting collection of samples, for drawing and painting, a fine physical cabinet and all the adjuncts for imparting thorough and comprehensive instruction in all branches. Thirty-four professors and assistant professors compose the faculty, and the board of trustees is as follows: Rt. Rev. Boniface Wimmer, O. S. B., President; Rev. Hilary Pirangle, O. S. B., Vice-President; Rev. Leo Haid, O. S. B., Secretary; and V. Rev. Andrew Hintenach, O. S. B.; Rev. Adelbert Mueller, O. S. B.; Rev. John B. Sommer, O. S. B.; and Rev. James Zilliox, O. S. B. The present number of students is three hundred and thirty-seven, and particular attention is paid to their religious instruction, in addition to the theological, scientific, classical and commercial branches. The cultivation of classical music is also an important feature at this institution. Letters of inquiry should be addressed to the Director of St. Vincent's College, Beatty's P. O., Westmoreland County, Pa.

IDLEWOOD,—*Summer Resort, W. S. Jackson, Proprietor.*

Situated in a natural forest, with pure spring water, delightful atmosphere, and at an elevation which commands a splendid view over the Chartiers Valley with its diversified and captivating scenery, Idlewood is rapidly becoming appreciated by business men as an excellent place for their families during Summer, and also as a desirable place for those from all parts of the country, troubled with throat or lung diseases. Distant from the city about seven miles by the P. C. & St. L. R. R., and about five miles by wagon road, its accessibility and advantages in everything pertaining to health-giving qualities, in air, water and every sanitary condition. Idlewood hotel (a model of neatness) with its series of cottages for families, has in the last two years attained a high reputation as a popular resort, and is destined to be one of the leading resorts of Western Pennsylvania. To the business men of Pittsburgh, Idlewood affords a splendid Summer home, which may be reached every evening, while to their wives and children its benefits are incalculable. Those who visit our city during the Summer months, either on business or pleasure, will find this the most fascinating spot in Pittsburgh's environs.

A. GOEDDEL,—*Restaurant and Saloon, Frankstown Av. and Broad St., East End.*

Mr. Goeddel was the first to succeed in the restaurant business in the East End, by giving thorough attention to supplying his tables with the best the market affords, and having everything cooked and served up promptly and in the best style. Meals can be had at all hours. In addition to the restaurant he also conducts a saloon which is headquarters for Cincinnati and Milwaukee beer. Mr. Goeddel was born in the East End, August 29, 1851, and commenced business in 1876, establishing his restaurant in 1878.

PHILIP H. ITTEL,—*Flour, Feed, &c., 362 Ohio St., Allegheny.*

The above caption represents one of the most reliable houses in the city dealing in flour, grain, seeds, mill feed, potatoes, hay, straw, salt and produce generally, and being very complete in this line.

AGNEW & CO.,

MANUFACTURERS OF

FLINT GLASS VIALS

AND

BOTTLES,

153 First Avenue,

PITTSBURGH, PA.

See Page 144.

J. B. KAERCHER,

Dealer in

Hardware & Cutlery,

73 Market Street,

*Bet. Fourth Ave. and
Diamond St.,*

PITTSBURGH, PA.

See Page 118.

J. H. STEVENSON,

Attorney at Law,

AND

Solicitor of American & Foreign Patents,

No. 100 Fifth Avenue,

PITTSBURGH, PA.

See Page 113.

JAMES A. McNALLY,

Importer and Jobber of

FOREIGN and DOMESTIC

WOOLENS,

60 Wood Street,

PITTSBURGH, PA.

See Page 125.

LEECHBURG IRON WORKS.

Kirkpatrick, Beale & Co.,

Manufacturers of all Grades of

FINE SHEET IRON AND TERNE PLATE,

Office, 143 First Avenue,

(Works, Leechburg, Pa.)

PITTSBURGH.

See Page 145.

DITHRIDGE CHIMNEY CO.

LIMITED,

Manufacturers of

LAMP CHIMNEYS,

17th Street, South Side,

PITTSBURGH, PA.

See Page 172.

J. M. HOFFMAN & CO.,

Sole Agents for the CELEBRATED

Sohmer & Co. Pianos

AND

JUBILEE ORGANS.

141 Smithfield Street,

PITTSBURGH, PA.

See Page 104.

W. H. HOLMES,

Manufacturer & Wholesale Dealer in

FINE OLD & NEW COPPER DISTILLED

RYE WHISKIES

(Tax Paid or in Bond.)

GENUINE IMPORTED

Wines, Brandies, Gins, and Champagnes,

117 Water Street & 154 First Avenue,

PITTSBURGH.

See Page 195.

PITTSBURGH DESK AND TABLE MANUFACTORY.

William Guckert & Co.,

Manufacturers of

Extension & Centre Tables,

DESKS, WARDROBES, &c.,

Of every Description on Hand and Made to Order.

Cor. Cherry & Strawberry Alleys,

(*Bet. Smithfield & Grant Sts.*)

Pittsburgh.

All kinds of Wood Turning and Sawing Done to Order.

Orders Respectfully Solicited.

See Page 112.

JAMES REES,

MANUFACTURER OF

Marine & Land Engines,

BLAST FURNACE, MACHINERY & CASTINGS,

Iron & Brass Castings, Sheet Iron & Copper

Pipes, Steam Boilers, Oil Tanks,

Salt Pans, &c.,

COR. DUQUESNE WAY & FOURTH ST.,

PITTSBURGH, PA.

See Page 125.

GEO. B. JOHNSTON, Successor to Geo. B. Johnston & Co.

Dry Goods, Trimmings, Boots, Shoes, Hats, Caps, etc., Main St., South Side.

Among the best known and most deservedly successful merchants on the South Side, George B. Johnston is prominent. He commenced business for himself in 1864, on a small capital, which he had previously earned by his own industry, and since that time he has persevered with an energy and determination that could not fail to command success. He now occupies a handsome three-story brick building, 25 feet front by 120 feet deep, fitted up and furnished with an especial view to the requirements of a first-class Dry Goods store and stocked with a full and complete assortment of Foreign and Domestic Dry Goods, Trimmings, Hats, Caps, Boots, Shoes, etc. Mr. Johnston has about \$35,000 invested in his business and always carries from \$15,000 to \$20,000 worth of stock. His trade, which is extensive both in city and country, ranges between \$30,000 and \$35,000 per annum and gives constant employment to seven clerks and salesmen, whose monthly pay-roll will average over two hundred dollars. Mr. Johnston is a native of Franklin County, Pa., but has lived in Pittsburgh since 1863. To his own unaided exertions is due his present success. He possesses perseverance, untiring energy, promptness and punctuality in all matters pertaining to business. Strictly correct in all transactions with all customers, courteous in his manners and attentive to every detail of his business, Mr. Johnston is deservedly popular with a large class. His house stands high in the estimation of the trading public.

WM. SCHUETZ,—Wagon & Buggy Manuf'r, Cor. Arlington Av. & First St., 31st Ward.

This business was started by Mr. Schuetz in 1870, with a moderate capital, where he has continued to do business to the present time. He occupies a double building, for Wagon-making and Blacksmithing, fronting on Arlington avenue 50 feet, having ample room to accommodate all. Everyone who calls upon him and favors him with their custom will be guaranteed first-class work at the very lowest figures. Mr. Schuetz is a practical mechanic in his trade and having the experience of many years in his business, none will go away without being fully satisfied with his workmanship as well as his prices. His residence and dwelling is immediately adjoining this shop, all of which is his own and improved property. He is prepared to manufacture to order two-horse wagons, buggies or spring wagons, and guarantees good stock and styles. Also will do Repairing promptly to order.

JOSEPH GANSTER,—Union Hotel, Penn Av. and P. R. R., East End.

This Hotel was opened in 1863 by Mr. Ganster, its genial landlord. The house is large and well arranged, and adapted to the business; and for the accommodation of guests a good bar is kept, also good stabling in connection. Prices will always be found reasonable. Mr. Ganster was born in France in 1817, and came to Pittsburgh in 1838. He commenced business where the Union Depot now stands. He is among our most popular landlords, and is highly esteemed.

J. B. RICHARDS,—Real Estate Broker and Insurance Agent, 42d & Butler Sts.

Mr. Richards engaged in the Real Estate and Insurance business in 1872, at his present place, corner 42d and Butler Sts., removing from there to 43d and Butler, then to 42d and Butler, where he has been successful in building up quite an extensive and profitable business in selling, renting and insuring property, placing loans, etc. Mr. Richards has held the office of notary public for three years. He is editor and publisher of the spicy and popular weekly publication, "*The East End*," the publication of which was commenced some years since, and which sprung very rapidly into public favor. He was born in Brockville, Canada, in 1849, and came to the States in 1870. Shortly afterwards engaged in his present business. He was engaged in the banking business in Canada prior to coming to this city.

BRILLIANT ICE COMPANY,—Seely Brothers,

Penn Av., near Liberty Hall, East End.

The purity and general excellence of the Ice put up by this well-known company commend it to families and all others. The Brilliant Ice Company was established in November, 1877, by Seely Brothers. Four Ice-houses are required for the storage of their Ice; and their stock in trade, including Ice, wagons, &c., is about \$10,000. They do a general business, delivering Ice through the city proper and the East End. Their main office is on Penn Av., near Liberty Hall, East End, but city customers can leave orders with W. W. Barker, 125 Fifth Av. Mr. F. H. Seely was born in Pittsburgh August 5, 1855, and Mr. D. N. Seely at the same place December 27, 1856. The latter gentleman is notary public.

C. B. SEELY,—Real Estate and Insurance Agent, Penn Avenue, East End.

Capt. Seely is one of the prominent citizens of the East End. He was born in Ebensburgh, Cambria county, Pa., May 11, 1824, and came to Pittsburgh in 1841. He has represented the East End district in the City Council, and has held other positions. In March, 1879, he opened an office on Penn Av., as a Real-Estate and Insurance agent. He represents some of the best and most reliable insurance companies in the country, and attends to the collection of rents, buying, selling or exchanging Real Estate, &c. Messages left at the office of John C. McCombs, 134 Fifth Av., city, will receive prompt attention.

BANNER TEA HOUSE,—W. H. Price, Proprietor, 170 Wylie Avenue.

At the sign of the big banner, No. 170 Wylie Av., between Elm and Logan Sts., is located the model Tea and Grocery establishment of Mr. W. H. Price. This house was founded April 1, 1877, by the present proprietor. He carries a choice and desirable stock of fine family Groceries, Japan, Oolong and all other popular Teas, Coffees, Spices, Sugars, Jellies and Canned Goods, Butter Cheese, Eggs, country produce and all articles usually found in a first-class metropolitan establishment. Mr. Price was born in Cambridge Co., Pennsylvania, April 13, 1843, and came to Pittsburgh when but one year of age. For six years previous to engaging in business at his present location, he was proprietor of a similar establishment on the South Side.

WM. KOSSLER,—Man'f. of Tin, Copper & Sheet Iron Ware, 200 Main St., 36th W.

This popular and thriving establishment was opened by Mr. Kossler in a three-story brick building in 1873. The stock is large and varied, and includes stoves, hardware and every variety of house furnishing goods arranged in three departments. Mr. Kossler was born in Pittsburgh in 1850; he is genial in manner, popular with all who know him and enjoys a trade extending over both cities and country.

JOHNSON, EAGYE & EARL,
Wholesale Grocers,

Nos. 120 Second & 149 First Ave.,

Sullivan Johnson,
Geo. W. Eagye,
Edwin F. Earl. }

PITTSBURGH, PA.

See Page 238.

C. F. AHLERS,
MERCHANT TAILOR,

No. 77 Smithfield St.,

PITTSBURGH, PA.

Good Goods, Latest Styles & Perfect Fits.

See Page 113.

RODY PATTERSON, Jr.

HOVER STABLES,

117 FOURTH AVENUE,

PITTSBURGH, PA.

Boarding Horses a Specialty.

Geo. A. Berry, Pres. *John Scott,*
Chas. G. Milnor, *Jas. Park, Jr.* } *Vice-Pres'ts.*
Sec. and Treas. *L. M. Plumer, Solicitor.*

PITTSBURGH
BANK FOR SAVINGS,

61 Fourth Avenue,

PITTSBURGH, PA.

See Page 90.

A. A. Hutchinson & Bro.,

Manufacturers and Shippers of

Pure Connellsville Coke,

Office, 94 Fifth Ave.,

PITTSBURGH, PA.

GLOBE MINES, Broadford, Pa.,

STANDARD MINES, Mt. Pleasant.

CAPACITY 800 TONS PER DAY.

See page 97.

H. LLOYD, SON & CO.

Manufacturers of Best Grades

Juniata Charcoal Bloom,

BAR, SHEET & BOILER PLATE

IRON,

KENSINGTON IRON WORKS,

Second Avenue, Pittsburgh, Pa.

See page 194.

Roaring Spring Mills. West Newton Mills. Mill Grove Mills.

KEYSTONE PAPER CO.,

Manufacturers of

ALL KINDS OF PAPER,

Rag & Straw Wrapping, Roofing Felt,

Lining Felt, Printed Wrapping, &c.

OFFICE AND WAREHOUSES:

Nos. 126 and 128 Second Avenue, PITTSBURGH, PA.,

22 Vesey Street, NEW YORK.

See Page 124.

PITTSBURGH CHEMICAL WORKS.

MILLS & CO.,

Manufacturers of

CONCENTRATED LYE AND KA-LYE,

And Dealers in HYDRAULIC CEMENTS,

White Lime, White Sand, Calcined Plaster, Fertilizers,
Sewer Pipe, Chimney Tops, Fire Brick,
Grate Tiles, &c.

Isaac Mills, Jr.,
Geo. Sheppard,
J. Brankstone,
S. C. Bullock.

Wareroom, 260 Liberty St.,
PITTSBURGH, PA.

See Page 183.

J. H. Borland.

W. C. Borland.

J. H. BORLAND & CO.,

Wholesale Auctioneers and Jobbers of

Boots, Shoes & Gaiters,

Nos. 53 and 55 Wood Street,

And 105 Third Avenue,

Auction Sales every Tuesday, } **Pittsburgh, Pa.**
at 10½ A. M.

Goods sold at Private Sale throughout the week at
Auction Prices.

WM. HASLAGE,
WHOLESALE & RETAIL

FAMILY GROCER,

Tea, Wine and Liquor Dealer, Coffee
Roaster, Spice Grinder, &c.

No. 18 Diamond Square,

PITTSBURGH, PA.

See Page 86.

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See page 197.

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See page 81.

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See page 84.

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See page 204.

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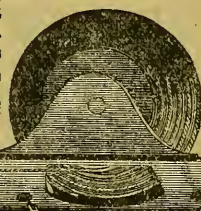
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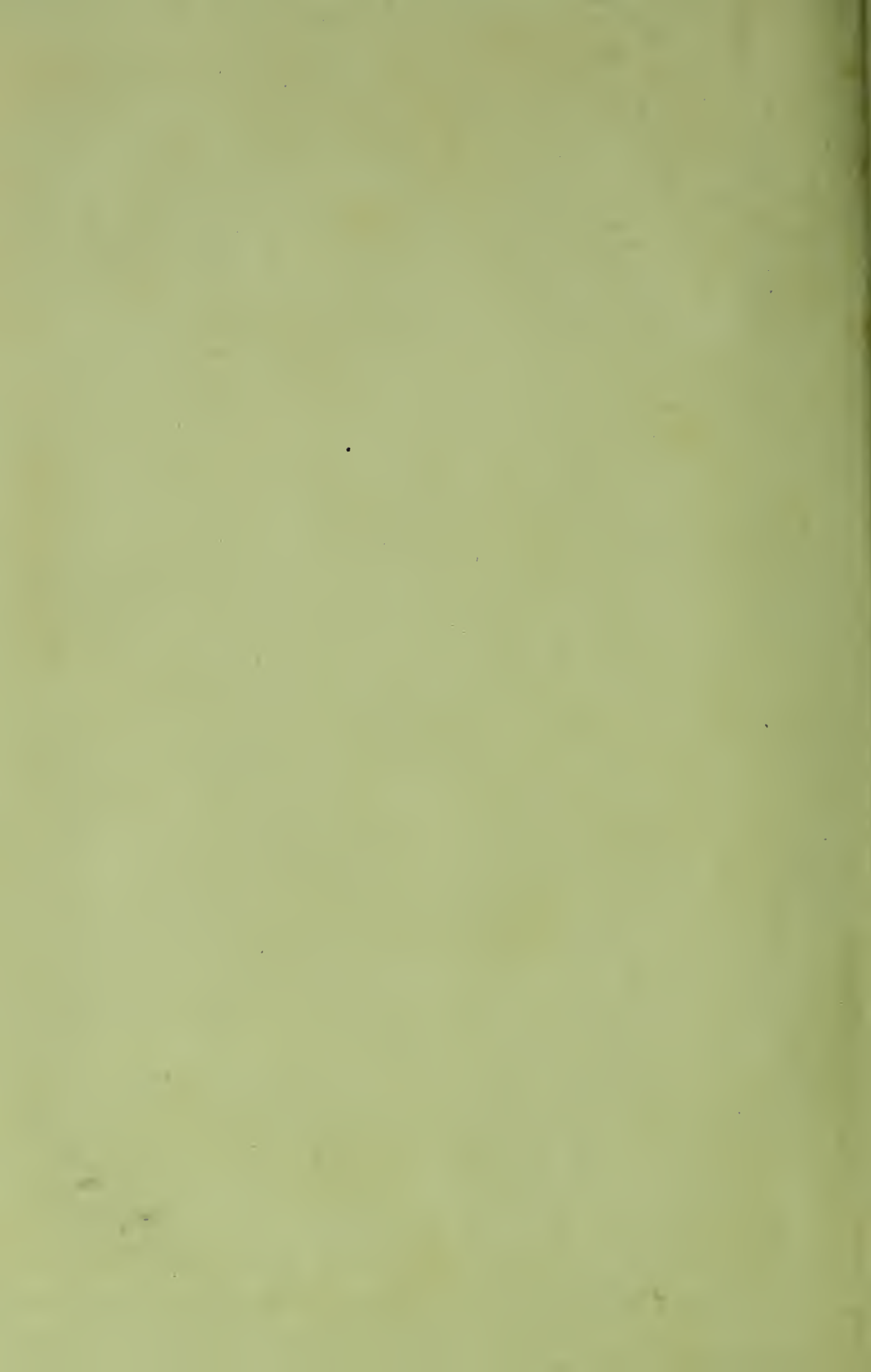
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